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ABSTRACT

Objectives of the study were (1) to develop and implement an alternative work experience program for a middle school; (2) to test the effect of the program on attitudes toward school, career maturity, and vocational interests of the students; and (3) to provide information and procedures for a model work experience program. Western Kentucky University, in cooperation with Bowling Green Junior High School, provided a total of 40 hours of planned career exploratory experiences in two occupational areas for 126 ninth grade students. Pretesting and post-testing of participating students and a control group utilized the School Sentiment Index (SSI), Career Maturity Inventory (CMI), and Ohio Vocational Interest Survey (OVIS). Three evaluations were conducted, two by external evaluators and one by a member of the project staff. Data for the internal evaluation were obtained from questionnaire surveys of students, parents, work experience sponsors, teachers, and the principal and counselor. Program costs were compared to the cost of establishing career exploration/practical arts programs. Based on data collection, analysis of test results, and the evaluation surveys, conclusions and recommendations were formulated. Eleven appendixes include project forms, student evaluation instruments, school sentiment index, and the two external evaluation reports. (RG)

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FINAL REPORT

Project No. V0093VZ

Grant No. OEG-074-1734

An Experimental Study of the Effects of An Alternative Work Experience Program in the Middle School

Research Project in Vocational Education
Conducted Under
Part C of Public Law 90-576

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August 1975

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CHAPTER I

INTRODUCTION

Career development theory emphasizes the importance of providing youngsters experiences which enable them to identify and try-on suitable work roles. Probably the richest source of these opportunities for most people is part-time work experience . . .[1]

The study reported herein reflects the results of efforts to develop, implement, and test the effects of an alternative work experience program designed for middle school pupils. Variables measured included the career maturity, attitude toward school, and vocational interests of ninth grade pupils. The project was federally assisted, and locally directed in Bowling Green, Kentucky. Personnel associated with Western Kentucky University and the Bowling Green Independent School System participated in its conduct.

Need for the Study

Of late, much has been written and verbalized about the importance of providing relevant career exploratory experiences for middle school/ junior high pupils. Much stress has been given to the significance of the middle school curriculum and its inherent responsibility for providing such exploratory experiences for young adolescents.

As Bailey and Stadt point out, a crucial point exists at the end of the junior high school experience when the pupil is faced with the responsibility for making a curriculum decision prior to entering high school. "The intimate relationship between education and career, and the potential effects of this decision on later available options, suggest that choice of high school curriculum is, in a very real sense, as much a career choice as an educational one."[2]

In-house vocational guidance programs, books, simulations, career days, field-trips, etc. are certainly helpful in preparing pupils for the eventualities of curriculum decision making and career direction setting. However, such activities can only go so far in acquainting pupils with the real world of work.

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[1]Edwin L. Herr, "Unifying an Entire System of Education Around a Career Development Theme." Paper presented at the National Conference on Exemplary Programs and Projects, Atlanta, Georgia, March, 1969.

[2]Larry J. Bailey and Ronald W. Stadt, Career Education: New Approaches to Human Development, McKnight Publishing Company, Bloomington, Illinois, 1973, p. 363.

Although it is generally assumed that work experience, as part of a middle school practical arts career exploration program, would be desirable for pupils, little information regarding the existence of such programs is available.

In his paper "Unifying an Entire System of Education Around a Career Development Theme," Edwin Herr proposes a number of operational goals toward which exemplary programs and projects might be directed. A number of Herr's suggested goals reinforce current thinking relative to developing, implementing and testing planned career development and work experience programs. Two of those goals toward which Herr suggests programs and projects might be directed are:

(a) Compare on different criteria of career maturity the status of youth who have had work experiences of different kinds with those who are exposed to simulated experiences.

(b) Determine how work experience activities can be integrated with the total school curriculum without impeding student progress toward a number of future goals simultaneously.

The value of providing work experience for adolescents has long been recognized by vocational educators. However, because of both real and imagined barriers, little attention has been given to providing exploratory work experience for pupils at the middle-school level. Consequently, there is a need to know whether or not an alternative work experience program for middle/junior high school pupils can be designed, effectively implemented, and tested in terms of its effect on participating pupils.

Objectives of the Study

1. To develop and implement an alternative work experience program for middle school pupils

2. To determine the effect of an alternative work experience program on the career maturity, attitude toward school, and vocational interests of middle school pupils

3. To provide information and procedures for the development and improvement of an alternative work experience program for middle school pupils

4. To provide information relative to the operational costs of an alternative work experience program independent of and supplemental to functional practical arts exploratory classes in a public school setting

Null Hypotheses

Null hypotheses tested in this study were concerned with the career maturity, attitude toward school, and vocational interests of ninth

grade pupils. The following specific hypotheses were tested:

Null Hypothesis 1: There is no significant difference in attitude toward making a career choice between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 2: There is no significant difference in knowledge of self between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 3: There is no significant difference in knowledge of jobs between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 4: There is no significant difference in competence relative to choosing a job between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 5: There is no significant difference in overall attitude toward school between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 6: There is no significant difference in attitude toward peers between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 7: There is no significant difference in attitude toward teachers between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 8: There is no significant difference in attitude toward learning between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 9: There is no significant difference in attitude toward school structure and climate between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 10: There is no significant difference in attitude toward the general notion of school between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 11: There is no significant difference in the strength of the highest assessed vocational interest areas between ninth

grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Null Hypothesis 12: There is no significant difference in the pretest strength of the highest assessed vocational interest areas and their posttest strength between ninth grade pupils who participated in a work experience program and ninth grade pupils who did not during the 1974-75 school year.

Limitations of the Study

One junior high school and one university community participated in the operational work experience program; therefore, the findings necessarily relate only to those settings. The Bowling Green Independent School System is atypical in that it supports a comprehensive K-12 career education program. The pupils who participated in this study had been involved in a career oriented curriculum (to include hands-on career exploration) for three years prior to the initiation of this project. Such intensive exposure undoubtedly affected the results to some degree and has implications relative to generalizations which can be made. The researcher is of the opinion that the results should not be generalized to school settings that do not offer a career oriented curriculum.

Western Kentucky University is also atypical in that it supports career education from both an administrative and instructional point of view. The university houses and financially supports the Center for Career and Vocational Teacher Education. It is the mission of the Center to provide direction and coordination to those phases of teacher education concerned with career and vocational teacher education. The Center accomplishes this through both internal and external research, service, development, evaluation, and instructional activities.

Definition of Terms

Alternative Work Experience Program for Middle School Pupils--A curricular program that provides middle/junior high school pupils with experiences in the world of work as non-paid participants and observers. The purpose of such a program is to provide relevant career exploration experiences not readily available to pupils within the typical school setting and to facilitate the process of rational career direction setting.

Practical Arts Education--The purpose of a practical arts program is to broaden the experience of middle/junior high school students by providing them with an opportunity to explore a diversity of career roles in order that they may be better prepared to make decisions on their personal needs and future career goals.[3] A practical arts

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[3]Practical Arts Education Unit, Bureau of Vocational Education, Kentucky State Department of Education, Frankfort, Kentucky.

program offers classes which are developed around and consistent with the occupational cluster concept.

Work Experience Sponsor--An employee of Western Kentucky University who volunteered to provide and direct work and career exploration experiences in his/her area of expertise for ninth grade program participants.

Teacher-Coordinator--A practical arts teacher from Bowling Green Junior High School who functioned as the chief liaison between Western Kentucky University and the Junior High School. Responsibilities of the teacher-coordinator included coordination of pupil transportation, pupil management and supervision, and providing feedback to the faculty of the participating Junior High School. Additionally, the teacher-coordinator was responsible for visiting work experience stations when pupils were in the work-setting and serving as a resource to both pupils and sponsors.

Work Experience Plan--A contractual type agreement negotiated between a volunteer sponsor and project staff member. The work experience plan outlined the experiences that would be provided for a participating ninth grade pupil in the work setting.

Satellite--A unit of approximately 120 pupils attending Bowling Green Junior High School. Each unit is composed of four homerooms which represents a stratified random sampling of pupils. A cadre of four basic curriculum teachers is assigned to each unit. Bowling Green Junior High School houses 3 1/2 eighth grade satellites and 3 1/2 ninth grade satellites.

Career Maturity--The place reached on the continuum of vocational development from exploration to decline.[4]

Career Maturity Inventory (CMI)--An instrument constructed to measure the maturity of attitudes and competencies that are critical in realistic career decision making.[5]

School Sentiment Index (SSI)--A self report device which attempts to secure a student's response to statements which pertain to five aspects of attitude toward school, thereby, eliciting a global index of one's attitude toward school.[6]

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[4]Donald Super, "The Dimensions and Measurement of Vocational Maturity" Teachers College Record, 1955, 57, p. 155.

[5]John O. Crites, Administration and Use Manual: Career Maturity Inventory (Monterey, California: CTB/McGraw-Hill, 1973), p. 3.

[6]Attitude Toward School K-12, (Los Angeles, California: Instructional Objectives Exchange, 1971) p. 45.

Ohio Vocational Interest Survey (OVIS)--A vocational interest inventory designed to assist pupils in grades 8-12 understand their vocational interests and relate them to the world of work.[7]

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[7]A. G. D'Costa, John G. Odgers et al. Ohio Vocational Interest Survey Manual for Interpreting (New York, New York: Harcourt, Brace Jovanovich, Inc., 1970) p. 32.

CHAPTER II

METHODS AND PROCEDURES

Introduction

The major thrust of the research being reported was to develop and implement an alternative work experience program to be used as the experimental variable within the research design. It was hypothesized that Western Kentucky University could provide work experiences for ninth grade pupils in all occupational clusters, could manage many of the barriers which prohibit the employment of underage students, could provide relevant work experiences in a small geographic area, and could manage a large number of student workers at one time. Consequently, Western Kentucky University functioned as the prime employing agency and provided the work situations needed for the conduct of the study.

A major premise, therefore, upon which the operational program rested was that Western Kentucky University could be classified as a typical employer. Personnel employed in the bookstore, snack-bars, bowling alley and weather station are accountable to their supervisors for the quality of their work just as are persons employed in similar situations in the private business world. In the same fashion, employees of the university farm, hospital, security and safety department, motor pool, television studios, etc. must meet the same employment standards and proficiency requirements as persons who work in similar settings elsewhere.

This 14 month research project was conducted in four phases. Phase I was utilized to conceptualize and develop a theoretical alternative work experience program which could be field-tested during Phase II. Phase II involved identifying work experience sponsors (university employees) and field-testing the model.

Phase III was concerned with refining the model based upon field-test results and recommendations of the advisory committee. This phase also involved implementing the actual operational program on a full scale basis. Additionally, major aspects of the testing program were conducted during this phase. The last phase (Phase IV) was utilized to establish a data management system and to analyze and interpret data which had been collected.

Research Design

A Pretest-Posttest Control Group Design and a Posttest-Only Control Group Design were employed in this study. The Pretest-Posttest Control Group Design was utilized to study the variable "vocational interests." The Posttest-Only Control Group Design was employed to study the

variables "career maturity" and "attitude toward school." Paradigms for these designs are as follows:

Pretest-Posttest Control Group Design[8]

RO_1 X O_2

RO_3 O_4

where: R= Random assignment to experimental or control group
O= Observation (test administration)
X= Treatment (work experience program)
parallel rows represent comparison groups equated by randomization

Posttest Only Control Group Design[9]

R X O_1

R O_2

The Ohio Vocational Interest Survey was administered on a pretest-posttest basis in an attempt to assess change in vocational interest patterns over time.

The Posttest-Only Control Group Design was employed to study "career maturity" and "attitude toward school." Because pupils attending the participating junior high school were proportionately assigned to homerooms based upon race, sex, elementary feeder school, and academic achievement, the researcher assumed representation. Additionally, random assignment of experimental and control groups was employed utilizing the cluster sampling technique to achieve randomization.

The testing program was designed such that all experimental and control pupils were administered the Ohio Vocational Interest Survey on a pretest basis. Cluster sampling was utilized for posttesting. Four experimental and four control homerooms were randomly drawn and randomly assigned for specific posttesting. Two homerooms from each group were administered the Ohio Vocational Interest Survey and the School Sentiment Index. Two homerooms from each group were administered the Career Maturity Inventory.

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[8]Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago, Illinois: Rand McNally and Company, 1963), p. 13.

[9]Ibid, p. 25.

Pre-Program Preparation

Bowling Green Junior High School was selected for participation in the study. This junior high school was identified due to its proximity to the University campus (less than one mile) and the rapport which had been established between Western Kentucky University and the Bowling Green City Schools.

All six elementary schools within the school system (grades 1-7) feed into Bowling Green Junior High School (grades 8-9). The Junior High is divided into seven components called satellites (see Figure 1). Each satellite is an autonomous unit consisting of four homerooms and four satellite teachers. The basic curriculum is taught by the four teachers within each satellite.

Practical Arts/Career Exploration classes in eight occupational clusters are taught outside the satellite units by certified personnel with expertise in the cluster area being taught. The clusters taught include Business/Office, Marketing/Distribution, Communications/Media, Manufacturing, Construction, Home Economics, Agri-Business and Natural Resources, and Power and Transportation.

At the eighth grade level, all pupils matriculate through a five week mini-course in each of the eight practical arts clusters. At the termination of the eighth grade experience, pupils select one practical arts area they wish to explore in depth for one class period per day during the entire ninth grade school year.

During the 1974-75 school year the eighth and ninth grades were each composed of 3½ satellites. Pupil placement into satellites was equally stratified based upon elementary feeder school, academic achievement, race, and sex.

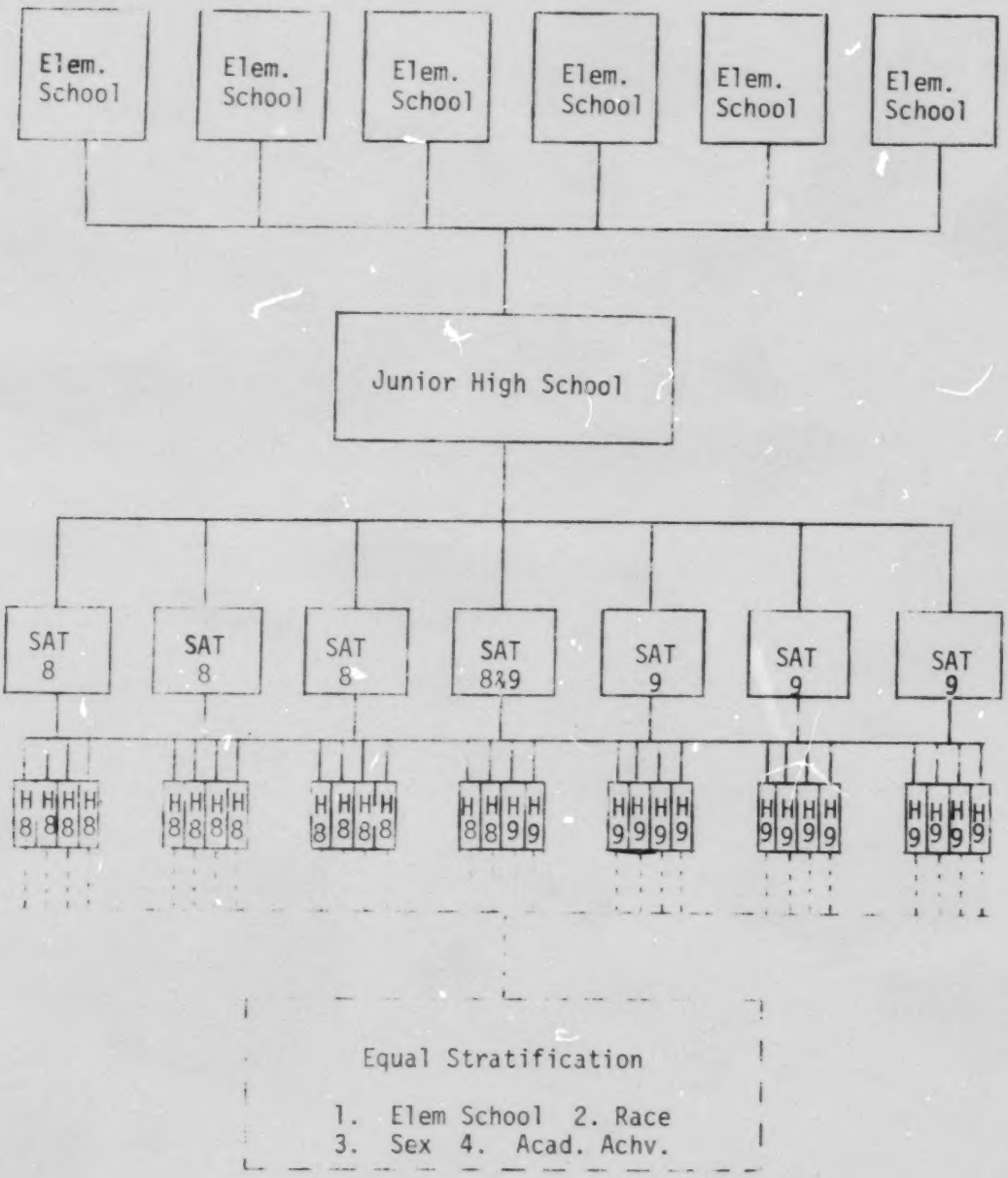
Program Pilot

During Phase I of this project, a theoretical alternative work experience model was conceptualized and developed. The model itself had many characteristics of typical cooperative education models; however, emphasis was not placed on skill development nor were the pupils paid.

Twenty ninth-grade pupils were randomly selected, from one satellite, for participation in the pilot phase of the work experience program. The students were administered the Ohio Vocational Interest Survey in an attempt to assess their major interest areas.

The theoretical model developed during Phase I called for placing each student into two work experience stations. Each student was to be placed in one area which was consistent with his/her measured interests for two full days and in a second area consistent with the practical arts area being studied at the Junior High School for another two days of work experience.

FIGURE 1
ORGANIZATION OF BOWLING GREEN JUNIOR HIGH SCHOOL



SAT - Satellite
H8 - 8th Grade Homeroom
H9 - 9th Grade Homeroom

Being placed in one area commensurate with each student's practical arts area allowed for supplemental related classroom instruction consistent with one work station on the University campus.

Following the development of the placement plan discussed above and an analysis of the type of work experience stations needed for the pilot program, the project staff identified University employees who were employed in areas consistent with the desired placement plan. Appointments were arranged with the potential sponsors and/or their supervisors. Each potential sponsor was offered an explanation of the program which was followed by a request for participation.

When an employee volunteered to serve as a sponsor, a letter of agreement and a pupil work experience plan was negotiated between the sponsor and a project staff member. The work experience plan outlined the types of experiences in which the assigned pupil(s) would participate.

Letters explaining the nature and scope of the project and pupil permission slips were mailed to the parents or guardians of all pupils who had been selected for participation. Additionally, all participating pupils were required to be covered by a home or school accidental injury insurance policy or have a parental waiver releasing the University and participating school system from liability due to accidental injury.

All pupils, but one, elected to participate in the pilot program. A substitute was selected to replace the pupil who chose not to participate. Signed permission letters were received from all parents.

After the project staff had received all parental permission letters, individual pupil interviews were scheduled with all pilot group members. The nature and scope of the project was explained to each pupil. Additionally, an explanation of OVIS results and rationale for work experience placement was offered.

Pupils were transported by school bus from the Junior High School at 8:15 to a central location on the campus of Western Kentucky University on four Wednesdays during the months of November and December, 1974. On the first work experience day, prior to going to their work stations, pupils participated in a one hour orientation session which included a greeting from a representative of the President of Western Kentucky University. Pupils also received packets containing name tags (which they were required to wear), a campus map indicating their work station assignments, and other appropriate information regarding their sponsors' names, campus phone extensions, etc.

Pupils were escorted to their initial work station on the first day and then again to their second work station on the third day. At the termination of each day's experience, pupils assembled in a central location at 1:30 p.m. for an attendance check and transportation back to the Junior High School in time for school dismissal.

During a 45 minute time slot built into the last work experience day, the pilot pupils evaluated the program. Components of the evaluation included work stations, sponsors, and project staff. These data proved valuable in refining the program for full scale implementation.

Advisory Committee

During the conduct of the pilot program, a potential membership list for a project advisory committee was developed. It was the intent of the project staff to include representatives of the vocational service areas at Western Kentucky University; the Kentucky State Department of Education's Practical Arts Unit and Division of Guidance Services; Bowling Green City Schools; Bowling Green Junior High School Parent-Teacher Organizaiton; work experience sponsors who participated in the pilot program; and other selected professionals with expertise in work experience programs, vocational education, business and labor. Appropriate personnel representing the above areas were identified and an advisory committee was established (see Appendix A).

The advisory committee met early in February, 1975, from 10:00 a.m. to 5:00 p.m. Prior to the meeting, the project staff summarized results of the pilot pupils' program evaluations. A slide presentation depicting the pilot program was prepared for the committee. Additionally, a list of questions and concerns from the project staff was generated. Appendix B contains the advisory committee's meeting agenda and the major concerns of the project staff which were presented to the committee for discussion.

The advisory committee offered numerous suggestions for program enhancement. Many of those suggestions and recommendations were utilized to modify, refine, and expand the model which was later implemented.

Program Preparation

Sample Selection

A sample of ninth grade pupils was effected for participation in the actual research design. This was conducted by randomly selecting two of Bowling Green Junior High School's ninth grade satellites (intact groups). The satellite which participated in the pilot program was not included for potential selection. The two satellites which were selected (from the possible three) were then randomly assigned to either the experimental or control group. The satellite selected as the experimental group incorporated 126 pupils. The control group (satellite) was made up of 125 pupils.

Teacher Orientation

Following the random selection and assignment of experimental

and control groups, a meeting was held to seek the cooperation of the eight basic curriculum teachers assigned to the experimental and control satellites and to orient them to the program. Every effort was made to emphasize the programmatic aspects of the study rather than the research component. This was done to reduce potential effects of experimental demand. All teachers insured their cooperation and participation.

OVIS Pretesting

All pupils in both the experimental and control groups were administered the Ohio Vocational Interest Survey (D'Costa and Odgers, 1970). The data obtained from this survey indicated the degree of interest each pupil possessed in each of 24 job clusters. The results of this survey facilitated the assignment of pupils to work experience stations on the University campus.

Parental Letter and Permission Slip

As was the case with the pilot phase, a letter explaining the work experience program and requesting permission for their child to participate in the program was sent to the parents or guardians of all pupils in the experimental group. A permission slip with a self-addressed, stamped envelope was also enclosed with the letter. No pupil was permitted to participate in the program without the written consent of one parent or guardian. The same accidental injury insurance or liability waiver requirements stipulated for the pilot pupils were enforced for the actual program participants.

Transportation Plan

A transportation plan, similar to that used for the pilot program, was developed to transport the experimental group of pupils from the Junior High School to the University campus. The scheduling of eight round trips on eight separate days was necessary.

The transportation plan called for the Bowling Green City Schools to provide two buses, each with a seating capacity of 66. Pupils were covered by school bus insurance carried by the school system.

A teacher of record was stationed on each bus during all pupil transportation periods. The cost of transporting the pupils to and from the University campus was minimal and the school system was reimbursed for the total cost involved.

The pupil pick-up and drop-off points were the Bowling Green Junior High School and the College of Education Building, Western Kentucky University. The approximate time for loading, traveling, and unloading was 20 minutes. On work experience days, pupils left the Junior High School at approximately 8:15 a.m. and were returned by 2:00 p.m.

A teacher-coordinator working conjointly with the Junior High School and the University scheduled all necessary transportation one month in advance with the Assistant Superintendent of the Bowling Green City Schools. Additionally, the teacher-coordinator maintained a daily record of all pupils being transported and coordinated the overall transportation process.

Lunch Plan

Since a number of pupils in the experimental group received either free or partial-paid lunches under the Federal School Lunch Program, it was necessary to set up a similar system for the days the pupils were on the University campus.

For the first work experience day, sack lunches for all experimental group pupils were prepared by the cafeteria staff of the Junior High School. The cost of each sack lunch was consistent with the price normally paid by each pupil at the school. For the remaining work experience days, pupils were given the option of purchasing a sack lunch at the Junior High School or purchasing a lunch in one of the campus grills or cafeterias at regular prices. The teacher-coordinator coordinated the lunch program for participating pupils.

Parent Orientation

Prior to implementing the full-scale work experience program, a project orientation program was developed for and presented to parents of pupils attending the participating junior high school. The program was incorporated into a regularly scheduled meeting of Bowling Green Junior High School's Parent-Teacher Organization. Approximately two hundred parents attended the meeting. A slide depiction of the pilot program was presented with appropriate explanations. Time was also allowed for questions and general discussion.

Pupil Assignment to Work Experience Stations

The treatment (work experience program) was divided into two cycles, Cycle I and Cycle II. Pupils were assigned to a different work experience station each cycle. Placement of pupils during each cycle was based on the individual's OVIS results and the practical arts area being studied at the Junior High School.

The OVIS "Guide to Career Exploration" provided detailed descriptions of each OVIS scale as well as a listing of typical jobs for each area of interest assessed. Using this as a guide, each pupil was assigned to a related work area on the University campus during one of the cycles, with the other cycle spent in a work area commensurate with the practical arts area selected for study by the pupil.

Cooperating Agency Agreement/Pupil Work Experience Plan

A standardized agreement (contract) was designed for presentation to each unit of the University which had the potential for offering work experiences for the experimental group of pupils (see Appendix C). The first part of the contract consisted of a formal agreement with the cooperating unit (university farm, hospital, weather station, etc.) to provide work and career exploration experiences for participating pupils. The second part of the agreement consisted of a work experience plan (outline) developed and agreed upon by a volunteer sponsor and a project staff member. The work experience plan outlined the experiences in which an assigned pupil(s) would participate during the time spent with the sponsor.

Prospective sponsors needed for the program and/or their supervisors were contacted by a project staff member and an appointment was arranged. During the appointment, the project's rationale and mechanics were explained. If the potential sponsor wished to participate, the work experience plan was negotiated and signed.

Teacher Meeting Regarding Pupil Placement

After the project staff developed a work experience placement plan for each pupil in the experimental group, a meeting was held at the Junior High School with the cooperating satellite teachers. The purpose of the meeting was to elicit feedback from the teachers regarding the planned work experience assignments for their pupils. An extremely high degree of consensus existed between teacher placement recommendations and the plan developed by the project staff. The meeting also provided an opportunity for the project staff to acquire and discuss relevant supplemental data regarding individual pupils.

Pupil Interview

Each pupil from the experimental group (n = 126) met with a project staff member at the participating junior high school. During this time, the pupil was given a rationale for the program and was advised concerning the two work experience stations to which he/she had been assigned. The strategy for placement was discussed with each pupil and an opportunity for questions and discussion was offered. Unless some legitimate objection was made by a pupil concerning the work experience placement system or other program aspects, agreement of the pupil was established.

Selection of Career Films

Prior to their first day's experience on the Universtiy campus, each pupil was asked to select three career films he/she would like to see from a list of 13 (see Appendix D). The 13 films available for

viewing were those in Series A of The Library of Career Counseling Films, distributed by Counselor Films, Inc., Philadelphia, Pennsylvania. The films were borrowed from the regional vocational education office and the Kentucky State Department of Education's Curriculum Development Center.

It was intended to provide each pupil with an opportunity to view his/her selected films during a planned orientation program at the beginning of the work experience program.

Pupil Packets

One week prior to initiating the work experience program, a pupil packet was assembled for each pupil. Each packet contained a "Student Report Folder" (OVIS results), an "Understanding Interests" workbook for interpreting the OVIS results, a career film schedule, campus map, sponsor information card (see Appendix E), and a name tag.

The packets were distributed to the pupils in their school homerooms on the morning of their first campus visit. All materials contained in the packets, except for the name tags and sponsor information cards, were for use primarily during the orientation program which was conducted during their first day on the University campus.

Sponsor Orientation Program

Prior to their first day of providing work experiences for participating pupils, sponsors were invited to attend a one-hour sponsor orientation session. One session per day was held for three consecutive days. This system allowed the sponsors to choose a time convenient to their personal schedules.

During the orientation session, the sponsors were reminded of the purpose and goals of the project. A slide presentation of the pilot program and explanations of how it related to what they would be experiencing in the coming weeks was presented. An opportunity was then provided to discuss any questions or concerns. Additionally, the following materials were disseminated to each sponsor: a project abstract (see Appendix F); a compilation of "Helpful Hints for Sponsors" (see Appendix G); a listing of the advisory committee members; and a brochure explaining career education in the Bowling Green City Schools (see Appendix H). Available for inspection by the sponsors were the "Understanding Interests" workbook developed by J. Wayne Ashley, Center for Career and Vocational Teacher Education, Western Kentucky University, and each pupil's "Student Report Folder," which listed the OVIS results.

Sponsor Participation

A total of 48 major sponsors or sponsor coordinators were identified and volunteered to participate in the project. Approximately one hundred additional personnel from across the University served in some sponsoring capacity during the program's operation. All personnel were either part-time or full-time employees of the University and held either semi-skilled, skilled, paraprofessional, or professional jobs.

Program Operation

Operational Framework

Each pupil in the experimental group was exposed to a total of 40 hours of work experience/career exploration on the University campus and 24 hours practical arts exploration, related to one on-campus work station, at the Junior High School. This time included program orientation and evaluation. On-campus experiences were broken down into slots of five hours per day, one day per week, for eight weeks.

Since the practical arts program was an inherent aspect of the participating school's curriculum, the control group continued to participate in its operation.

Work experiences were divided into two cycles. Placement in one cycle (work station) was based on the individual's practical arts choice for his/her ninth grade year, and placement in the second cycle was based on the results of the OVIS. In cases where the practical arts choice and OVIS results correlated exactly, the individual was placed in an area related to his/her second highest OVIS interest area, or in an area consistent with his/her expressed occupational goal.

Cycle I included the first, second, third and fourth weeks on the University campus, February 27, March 6, 18, 27, 1975. Orientation was held during the first week. Cycle II included the fifth, sixth, seventh, and eighth weeks on the campus, April 3, 10, 24, and May 1, 1975. Figure 2 dipicts pupil time on the University campus.

Program Orientation

The first day pupils arrived on the University campus, a comprehensive orientation program was presented. An attempt was made to design the orientation program in a fashion somewhat similar to programs offered for new employees, by large business and industry concerns. The following reflects the components presented as part of the orientation program:

FIGURE 2

CALENDAR OF PUPIL TIME AT WESTERN KENTUCKY UNIVERSITY

<table>
<tr><td>February 27</td><td colspan="2">March 6, 18, 27 April 3, 10, 24</td><td>May 1</td></tr>
<tr><td>(8:15 AM) Bus to WKU Campus</td><td colspan="2">Bus to the University Campus
and
Report to Sponsor</td><td>Bus to WKU Campus
and
Report to Sponsor</td></tr>
<tr><td rowspan="2">(9:00 AM)

Orientation</td><td colspan="2">(Cycle I) (Cycle II)

Work Experience/
Career Exploration</td><td>Work Experience/
Career Exploration</td></tr>
<tr><td colspan="2">(1:30 PM)
Reassemble</td><td>(12:30 PM)
Reassemble

Pupil Evaluation</td></tr>
<tr><td>(1:45 PM)
Bus to Junior High</td><td colspan="2">Bus to Junior High</td><td>Bus to Junior High</td></tr>
</table>

- Greeting (9:00-9:10 a.m.)
  Pupils were greeted by the project director and by the Assistant to the President of Western Kentucky University and Chairman, Board of Education, Bowling Green Schools.

- Orientation Film and Slide Presentation (9:10-10:00 a.m.)
  Following the official greetings, all pupils viewed "The World of Work" from the Library of Career Counseling Films, Inc. Philadelphia, Pennsylvania. A slide presentation of the pilot program was given by the project director following the movie. The slide presentation included explanations and comments about what the pupils could expect during the coming weeks, and what was expected of them.

- OVIS Group Interpretation (10:00-10:45 a.m.)
  Personnel from the Center for Career and Vocational Teacher Education and the Department of Counselor Education, Western Kentucky University, presented a seminar to the experimental group relative to interpreting results of the Ohio Vocational Interest Survey. Instructions were given during the seminar on how to work through the "Understanding Interests" workbook to help reach an understanding of their assessed interests.

- Movie Schedule
  Prior to dismissing for lunch, pupils were instructed concerning the career movie schedule included in their packets. The schedules provided the time and place each pupil was to report to view the three career films he/she previously selected.

- Lunch (10:45-11:40 a.m.)
  Pupils were given 55 minutes for lunch. They were allowed to have lunch at the place of their choice on the campus. Sack lunches were provided by the Junior High School.

- Career Films (11:40-1:00 p.m.)
  During this period, each pupil viewed his/her previously selected career films.

- Safety Presentation (1:10-1:30 p.m.)
  The coordinator of Safety Education, Western Kentucky University, presented a program to promote safety consciousness among the pupils while they were on campus. Appropriate aid and information facilities were pointed out, should they be needed.

The Work Experience

Pupils reported to their assigned sponsors no later than 9:00 a.m. each day. On the first day per cycle, each pupil was escorted by a project staff member to his/her work experience station and was introduced to the assigned sponsor. Thereafter, the pupils were solely responsible for finding their own way from the bus to their work stations and arriving on time.

Work assigned to each pupil was left to the discretion of the sponsor. Sponsors, however, were responsible for providing experiences in the areas indicated on their pupil's work experience plan. Time for lunch was agreed upon between the pupil and his/her sponsor. All pupils reported to a designated area at 1:30 p.m. for an attendance check and transportation back to the Junior High School.

When a pupil was absent from school, a project staff member contacted the appropriate sponsor as early in the morning as possible. If a pupil did not arrive at his work station and was not absent from school, the sponsor advised the project director so that appropriate measures could be taken.

The teacher-coordinator visited as many work stations as time permitted on the days pupils worked on the University campus. Cooperating satellite teachers at the Junior High School were given an open invitation to visit any of the work stations at any time. When Junior High School teachers visited work stations, they were escorted by a project staff member.

The following represents the areas on the University campus to which pupils were assigned for work experience:

1. Health Occupations
   - Nursing
   - Radiology
   - Medical Laboratory
   - Medical Records
   - Pharmacy
   - Dentistry

2. Communications and Media
   - Television Production
   - Photography (film and slide development, printing, and duplicating)
   - Mass Printing
   - Graphics
   - Journalism (University newspaper and yearbook)
   - Audio-Visual Services

3. Physical Education and Recreation
   - Teacher Education
   - Recreation (all types; indoor-outdoor)
   - Professional Athletics

4. Biology

5. Food Services

6. Public Safety and Security

7. Physics and Astronomy

8. Business/Office and Clerical Services

9. Marketing and Distribution (various sales and service units)

10. Meteorology

11. Manufacturing and Construction

12. Oceanography

13. Computer Operations and Data Processing

14. Geology

15. Agriculture (University farm)

16. Legal Affairs

17. Physical Management
    - Carpentry
    - Painting
    - Electronics
    - Landscaping
    - Steam and Electrical Distribution

18. Professional Music

19. Professional Dance

20. Home Economics and Family Living
    - Interior Design
    - Textiles
    - Dietetics
    - Child Development and Family Living

21. Theatre Production

22. Teaching and Counseling

23. Military Science (to include aviation)

24. Arts and Crafts
    - Ceramics
    - Sculpture
    - Drawing
    - Painting
    - Metal Pouring

25. Engineering Technology
    Surveying
    Electronics
    Sanitation
    Material Strength
    Machine Design

26. Postal Services

Pupil Evaluation of Cycles I and II

Pupils were provided with an opportunity to evaluate each cycle of the work experience program. A 20 item Likert-response type instrument was utilized for this purpose (see Appendix I). Additionally, the instrument sought general comments from the pupils regarding any aspect of the program they chose to address.

Pupil evaluation of the Cycle I experience was conducted at the Junior High School prior to the initiation of Cycle II. One hour was set aside on the last day of Cycle II for an evaluation of Cycle II. Specific evaluative procedures and data are presented in the evaluation section of this report.

Subject Mortality

A total of 126 letters were sent to parents or guardians of the experimental group. From these, 123 permission slips were returned. Of the 123 pupils, eleven left the program for various reasons, leaving a total of 112 pupils in the experimental group.

Posttest

The following tests were administered to the experimental and control groups following completion of the work experience program: Ohio Vocational Interest Survey (D'Costa and Odgers, 1970); School Sentiment Index (Instructional Objectives Exchange); and the Attitude Scale and selected subsections of the Competence Test of the Career Maturity Inventory (Crites, 1973).

All posttests were administered to randomized samples of the experimental and control groups. Method of administration and a brief rationale behind why these instruments were utilized follows:

1. Ohio Vocational Interest Survey (OVIS)
   The OVIS was administered on a pre-posttest basis in an attempt to detect interest pattern changes among members of the experimental and control groups and to assist in the pupil placement process.
   Two homerooms were randomly chosen from both the experimental and control groups. Consequently,

the OVIS was administered, as a posttest, to 57 pupils of the experimental group and 54 pupils of the control group. These numbers reflect approximately 50 percent of each group.

2. School Sentiment Index (SSI)

   The basic objective of the SSI (see Appendix J) is to measure attitude toward school. The instrument assesses five dimensions of attitude toward school, attitude toward peers, attitude toward teachers, attitude toward learning, attitude toward school structure and climate, and attitude toward the notion of school in general. Additionally, the instrument yields a global estimate of attitude toward school. The SSI was administered to the same sample groups as was the OVIS posttest.

3. Career Maturity Inventory (CMI)

   The basic objective of the CMI is to measure the maturity of attitudes and competencies that are critical to realistic career decision making.

   The Attitude Scale and three parts of the Competence Test were administered to two homerooms in each of the experimental (52 pupils) and control (54 pupils) groups. The subsections of the Competence Test which were administered to the pupils were: Knowing Yourself, Knowing About Jobs, and Choosing a Job. The entire Attitude Scale was administered to both sample groups.

Approximations of Pupil and Sponsor Time Requirements

Table I presents approximations of pupil time required for participation in the project. Table II presents a similar analysis relative to sponsor time requirements.

Program Costs

To provide information relative to approximate operational costs of an alternative work experience program, independent of and supplemental to functional practical arts exploratory classes in a public school setting, data were collected from practical arts classroom teachers and from expenditure records associated with the project being reported (less the research component costs).

Approximate set-up and operating costs for the following five practical arts clusters and the work experience program being reported are presented in the findings section of this report: Agriculture and Natural Resources, Power and Transportation, Manufacturing, Construction, and Marketing and Distribution.

TABLE 1

PUPIL TIME REQUIREMENTS
EXCLUDING PRACTICAL ARTS INSTRUCTION

Experimental Group (n = 112)		
Pretest (OVIS - 2 hours)	(2 hrs. x 112)	
Orientation and Work Experience		
8 days, 5 hrs./day	(40 hrs. x 112)	
Posttests		
OVIS	(2 hrs. x 57)	
SSI	(.5 hr. x 57)	
CMI	(2 hrs. x 52)	
TOTAL HOURS		4951
Control Group (n = 125)		
Pretest (OVIS - 2 hrs.)	(2 hrs. x 125)	
Posttests		
OVIS	(2 hrs. x 54)	
SSI	(.5 hr. x 54)	
CMI	(2 hrs. x 54)	
TOTAL HOURS		493
TOTAL HOURS EXPERIMENTAL/CONTROL GROUPS		5444

TABLE 2

SPONSOR TIME REQUIREMENTS

Contract Agreement	(.5 hr. x 48)
Orientation Program	(1 hr. x 12)*
Pupil Time	(4.5 hrs. x 7 days x 112 pupils)
TOTAL HOURS	3564

*Based upon sponsor attendance

CHAPTER III

ANALYSIS OF DATA AND PRESENTATION OF FINDINGS

Three major instruments were utilized to collect necessary data to answer the questions and test the hypotheses posed in Chapter I. Those instruments were: the Career Maturity Inventory--Attitude Scale and three subsections of the Competence Test (Knowledge of Self, Knowing About Jobs, and Choosing a Job); the School Sentiment Index; and the Ohio Vocational Interest Survey. Additionally, the project staff developed five questionnaires which were utilized to collect supplemental feedback and evaluative data.

The major instruments were administered to samples of the experimental and control groups. The instruments developed by the project staff were administered to the entire experimental group, parents of all experimental group members, all work experience sponsors, the satellite teachers of the experimental group, and the counselor and principal of the participating junior high school.

Career Maturity

Attitude Scale (Career Maturity Inventory)

The Attitude Scale of the Career Maturity Inventory attempts to measure the maturity of attitudes that are important to realistic career decision making. The dimensions assessed within the context of the Attitude Scale are: involvement in the choice process, orientation toward work, independence in decision making, preference for career choice factors (extent to which an individual bases his choice upon a particular factor), and conceptions of the choice process (extent to which an individual has accurate or inaccurate conceptions about making a career choice).[10]

Table 3 presents mean attitude scale scores by sex for the experimental and control groups independently and in combination. These data reveal that females as a whole scored higher than did males. The mean score for the entire control group ($\bar{x}$ = 33.42) was slightly higher than that of the experimental group ($\bar{x}$ = 32.98). Experimental males scored the lowest of all groups ($\bar{x}$ = 31.64) while experimental females scored highest ($\bar{x}$ = 34.81).

An analysis of variance was conducted to test for any significant interaction when "sex" and "group membership" were used as independent variables. The results of the analysis are presented in Table 4. No significant interactions were found.

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[10]John O. Crites, Administration and Use Manual: Career Maturity Inventory (Monterey, California: CTB/McGraw-Hill, 1973), p. 3.

TABLE 3

MEAN C.M.I. ATTITUDE SCALE SCORES BY GROUP AND SEX

Group	Sex	Mean	Standard Deviation	Size of n
Entire Population	M + F	33.14	5.23	109
Entire Population	M	32.09	5.19	64
Entire Population	F	34.62	4.96	45
Experimental Group	M + F	32.98	5.79	52
Control Group	M + F	33.42	4.78	54
Experimental Group	M	31.64	5.07	33
Control Group	M	32.58	5.37	31
Experimental Group	F	34.81	6.37	21
Control Group	F	34.56	3.45	23

TABLE 4

ANALYSIS OF VARIANCE FOR C.M.I. ATTITUDE SCALE BY GROUP AND SEX

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Main Effects					
Group	5.71	1	5.71	.215	.999
Sex	172.03	1	172.03	6.483	.012*
2-Way Interactions					
Group-Sex	9.194	1	9.194	.346	.999

*Statistically significant at the .01 level

Using "sex" and "group membership" as main effects, a nonsignificant f-value was determined for "group membership." Consequently, no significant difference existed between the experimental and control groups relative to maturity of attitudes considered important in realistic career decision making.

Significance at the .01 level was detected, however, when "sex" was used as a main effect. Males and females were significantly different relative to the maturity of attitudes considered important in realistic career decision making. Inspection of the means indicate that female pupils were significantly more mature in the maturity of their attitudes than were males.

Competence Test (Career Maturity Inventory)

The Competence Test of the Career Maturity Inventory attempts to measure the maturity of competencies that are considered critical in career decision making. In contrast to the Attitude Scale, the Competence Test seeks to assess the more cognitive factors involved in occupational selection.[11]

Five subsections comprise the Competence Test. Three subsections were administered to samples of the experimental and control groups. Those subsections were: Self-Appraisal (Knowing Yourself), Occupational Information (Knowing About Jobs), and Goal Selection (Choosing a Job).

Table 5 presents mean subscale scores by sex for the experimental and control groups independently and in combination. These data reveal that females scored higher in all three of the areas assessed (Self-Appraisal, Occupational Information, and Goal Selection) than did males. Females within the experimental group consistently maintained the highest mean scores followed by control females. This was also the case reported for the Attitude Scale.

Experimental and control males had similar mean scores in the areas of Occupational Information and Goal Selection; however, a somewhat higher mean score was computed for experimental males ($\bar{x}$ = 10.50) in the area of Self-Appraisal than for control males ($\bar{x}$ = 9.45).

An analysis of variance was conducted to test for any significant interactions when "sex" and "group membership" (experimental or control) were used as classification variables. The results of the analyses are presented in Table 6. No significant interactions were found within any of the three Competence Test subsections.

Using "sex" and "group membership" as main effects, non-significant f-values were determined for "group membership." Consequently, no significant differences existed between the experimental and control groups relative to: Self-Appraisal, Occupational Information, or Goal Selection. The greatest difference between the groups (although non-significant) was in the area of self-appraisal (Knowing Yourself). The experimental group appeared to be somewhat better able to appraise their job-related capabilities.

When "sex" was introduced as a main effect, significance at the .01 level was computed for all three subsections. Males and females were significantly different relative to their ability to appraise personal job-related capabilities (strengths and weaknesses), how much they knew about the world of work, and how adept they were in matching personal characteristics with occupational requirements. Inspection of the means indicate that females possessed significantly more mature competencies in the three areas discussed above than did males.

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[11] Ibid.

TABLE 5

MEAN C.M.I. COMPETENCE TEST SUBSCALE SCORES
BY GROUP AND SEX

Subscale		Mean	Standard Deviation	Size of n
Self-Appraisal				
	Entire Population	10.74	4.08	108
	Experimental Group	11.42	3.71	54
	Control Group	10.17	4.41	54
	All Males	9.98	4.33	64
	All Females	11.82	3.47	45
	Experimental Males	10.50	3.35	33
	Control Males	9.45	5.18	31
	Experimental Females	12.57	3.97	21
	Control Females	11.13	2.94	23
Occupational Information				
	Entire Population	14.22	3.56	108
	Experimental Group	14.29	3.30	54
	Control Group	14.24	3.75	54
	All Males	13.31	3.67	64
	All Females	15.51	2.98	45
	Experimental Males	13.27	3.25	33
	Control Males	13.35	4.13	31
	Experimental Females	15.48	3.22	21
	Control Females	15.43	2.84	23
Goal Selection				
	Entire Population	11.29	3.59	108
	Experimental Group	11.67	3.28	54
	Control Group	11.00	3.83	54
	All Males	10.59	4.02	64
	All Females	12.29	2.60	45
	Experimental Males	10.91	3.60	33
	Control Males	10.25	4.46	31
	Experimental Females	12.48	2.73	21
	Control Females	12.00	2.51	23

Attitude Toward School

To measure attitude toward school, the School Sentiment Index (Secondary Level) was administered to samples of the experimental and control groups. Five aspects of attitude toward school were assessed by the School Sentiment Index (SSI): teachers, learning, school structure and climate, peers, and the notion of school in general.

TABLE 6

ANALYSIS OF VARIANCE FOR C.M.I. COMPETENCE TEST SCORES
BY GROUP AND SEX

Competence Area	Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. Level
Self-Appraisal	Main Effects					
	Group	38.78	1	38.78	2.42	.119
	Sex	92.01	1	92.01	5.34	.017*
	2-Way Interactions					
	Group-Sex	1.08	1	1.08	.067	.999
Occupational Information	Main Effects					
	Group	.027	1	.027	.002	.999
	Sex	119.33	1	119.33	10.053	.002*
	2-Way Interactions					
	Group-Sex	.099	1	.099	.008	.999
Goal Selection	Main Effects					
	Group	9.07	1	9.07	.725	.999
	Sex	71.38	1	71.38	.711	.018*
	2-Way Interactions					
	Group-Sex	.200	1	.200	.016	.999

*Statistically significant at the .01 level

A single score reflecting a global estimate of attitude toward school as well as a score for each dimension was obtained for each sample group member. Tests of statistical significance were conducted between samples of the experimental and control groups for each attitudinal dimension as well as for the composite index. Table 7 presents the results.

The data reveal that the experimental group had a statistically significant better attitude toward learning than did the control group. Significance of .05 or less was not computed for any other dimension nor for the composite index. However, the mean score of the experimental group for the composite index (comprehensive attitude toward school) and the significance level computed (.150) indicate the group approached having a better comprehensive attitude toward school than did the control group. A higher mean for the experimental group was also computed for the dimensions, "notion of school in general" and "attitude toward teachers."

TABLE 7

T-TESTS FOR SCHOOL SENTIMENT INDEX (ATTITUDE TOWARD SCHOOL)

Dimension	Group	No. of Cases	Mean	Standard Deviation	F Value	DF	Signif. Level
Composite Index (comprehensive attitude toward school)	Exp.	57	204.32	23.50	-1.45	109	.150
	Cont.	54	197.35	27.17			
Attitude Toward Learning	Exp.	57	17.49	3.55	-2.88	109	.005*
	Cont.	54	15.72	2.88			
Attitude Toward School Structure and Climate	Exp.	57	50.21	9.99	.15	109	.882
	Cont.	54	50.46	7.43			
Attitude Toward Peers	Exp.	57	12.10	2.82	.13	109	.898
	Cont.	54	12.14	3.23			
General Attitude Toward the Notion of School	Exp.	57	26.46	6.05	-1.07	109	.288
	Cont.	54	25.34	4.97			
Attitude Toward Teachers	Exp.	57	96.77	12.79	-.84	109	.403
	Cont.	54	94.56	14.97			

*Statistically significant at the .01 level

Vocational Interests

Ohio Vocational Interest Survey (OVIS)

The Ohio Vocational Interest Survey is an inventory designed to assess the vocational interests of pupils in grades 8-12. Incorporating a "Data-People-Things" concept basic to the Dictionary of Occupational Titles, the Ohio Vocational Interest Survey supplies each student with information concerning 24 interest areas called interest scales.

Interest scales are ranked within the context of each pupil's inventory results. Each pupil scores a "degree of interest" for each interest scale. This degree of interest is referred to as a scale score.

Scale scores are in effect raw scores. They are computed according to a pupil's response to 11 job activity items which make up each interest scale. Each item is assigned a value between one and five, contingent upon the pupil's like or dislike for a particular job activity item. Thus, a pupil's scale score for each interest scale may range from 11 to 55.

For use in the experimental design of this study, scale scores (raw scores) were converted to z scores in order to compare group results.

The experimental group (112 pupils) and the total control group (125 pupils) were administered the OVIS on a pretest basis. Fifty-one pupils from the experimental group and 52 pupils from the control group were utilized for posttesting. Therefore, only the results of those pupils in the experimental and control groups, who were administered the OVIS on both a pre and posttest basis, were utilized for statistical analysis.

A t-test was conducted to determine if there was a significant difference within each group relative to the highest pretest scale score and the highest posttest scale score (see Table 9). Significance at the .05 level of confidence was not found within either group. Consequently, the degree of strength which pupils displayed for the highest assessed interest area on the pre and posttests was not significantly different.

TABLE 8

WITHIN GROUP T-TEST
BETWEEN PRE-POSTTEST OVIS SCALE SCORES

Group	N	$\bar{X}$	Standard Deviation	T Value	Signif. Level
Experimental					
Pre	51	1.48	0.72	0.71	0.478
Post		1.41	0.70		
Control					
Pre	52	1.56	0.70	1.44	0.157
Post		1.32	1.03		

It should be noted that a "ceiling effect" was a threat to result validity. Caution must be exercised in making generalizations based upon scale scores as no pupil could receive a scale score above 55.

Additionally, a t-test was used to determine if a significant difference existed within groups between the second highest OVIS scale score on a pre-post basis. Again, no significance was found for either group at the .05 level of significance. Table 9 illustrates the results.

TABLE 9

WITHIN GROUP T-TEST BETWEEN SECOND HIGHEST
PRE-POSTTEST OVIS SCALE SCORES

Group	N	$\bar{X}$	Standard Deviation	T Value	Signif. Level
Experimental					
Pre	51	1.08	0.75	-0.03	0.974
Post		1.09	0.71		
Control					
Pre	52	1.21	0.69	1.73	0.090
Post		0.93	1.01		

Although no acceptable level of significance was found within either group between the highest or second highest pre and posttest scale scores, significance at the .01 level was computed for both groups when the strength of the highest pretest interest area was compared to its strength on the posttest. Similar results were found when the second highest pretest scale score was followed through on the posttest.

TABLE 10

WITHIN GROUP T-TESTS BETWEEN TWO HIGHEST OVIS
PRETEST SCALE SCORES AND THEIR STRENGTH ON POSTTEST

Group	N	$\bar{X}$	Standard Deviation	T Value	Signif. Level
Experimental					
Pre	51	1.47	0.73	5.26	0.001*
Post		0.95	0.86		
Control					
Pre	52	1.56	0.69	3.27	0.002*
Post		1.01	1.13		
Second Highest Scale Score Follow Through					
Experimental					
Pre	51	1.09	0.75	4.71	0.001*
Post		0.65	0.92		
Control					
Pre	52	1.21	0.69	2.74	0.008*
Post		0.75	1.08		

*Significant at the .01 level of confidence

Further, a t-test was used to test for a significant difference between groups relative to the two highest pretest scale scores and their values on the posttest. No acceptable significance level was computed in either case. Consequently, no differences between groups was determined over time (between pretest and posttest) relative to the strength of the two highest assessed pretest interest areas. Data are presented in Table 11.

TABLE 11

BETWEEN GROUP T-TESTS FOR TWO HIGHEST OVIS PRETEST SCALE SCORES AND THEIR STRENGTH ON POSTTEST

Group	N	$\bar{X}$	Standard Deviation	T Value	Signif. Level
Experimental	51	0.95	0.86	0.28	0.78
Control	52	1.01	1.13		
Second Highest Scale Score (Same Interest Scale)					
Experimental	51	0.65	0.92	0.51	0.61
Control	52	0.75	1.08		

Change in Degree of Interest

Table 12 illustrates the percentage of pupils which scored lower, the same, or higher on the posttest than on the pretest for the highest assessed pretest interest area. The data reveal that the strength of the highest pretest interest area decreased more for the experimental group than for the control group between pre and posttesting. Fewer experimental pupils than control pupils demonstrated the same degree of interest on the posttest relative to the highest pretest interest area, and slightly fewer experimental pupils scored higher on the posttest than control pupils.

The distribution of change in degree of interest demonstrated by the experimental group, as opposed to the control group, may be attributed to a work experience program that provided experimental pupils with data and experiences from which to make a more realistic appraisal of job areas as they relate to self.

Additional trend data tends to support the above assumption. Fifty-nine percent of the pupils within the experimental group changed major interest areas between pre and posttesting, whereas, 50 percent of the control group demonstrated such a change.

TABLE 12

PERCENTAGE OF CHANGE IN OVIS SCALE SCORES BETWEEN PRE AND POSTTEST FOR HIGHEST PRETEST INTEREST AREA

Group	% Lower	% Same	% Higher
Experimental	43%	19%	38%
Control	36%	24%	40%

Future Educational Plans

The Ohio Vocational Interest Survey also serves as a vehicle for eliciting data relative to the future educational plans of pupils. The instrument seeks responses relative to the high school program in which pupils plan to enroll, what their post-high school plans are at the time of test administration, and if they are interested in vocational education programs.

Table 13 presents response data for the experimental and control groups on a pretest-posttest basis. The data reveal that little change occurred between pre and posttesting for either group relative to the high school programs in which they planned to enroll. The largest segment of both groups planned to enter a college preparatory high school program. Both groups demonstrated a noticeable change between pre and posttesting relative to entering a business-commercial high school program. Interest in entering such a program dwined between testing. A higher percentage of experimental pupils than control pupils indicated their high school plans to be something other than those options listed on the instrument.

Relative to post-high school plans little change, in most instances, was detected within or between groups between pre and posttesting. The majority of pupils in both groups consistently indicated interest in attending a junior college, college, or university. It is interesting to note that the percentage of control pupils who planned to attend a vocational-technical school remained the same over time, whereas, almost 50 percent fewer experimental pupils planned to attend a vocational school when posttest and pretest results were compared.

The percentage of control pupils who were undecided about their post high school plans decreased somewhat between pre and posttesting; however, the number of undecided experimental pupils increased. This difference between groups could possibly be attributed to the work experience program. The experiences provided the experimental group might have led to a reassessment of plans following high school.

Interest in becoming involved in vocational education programs decreased between pre and posttesting by 10 percent for the experimental group, whereas, demonstrated interest/disinterest remained consistent for

the control group. Again, more change over time occurred within the experimental group than within the control group.

TABLE 13

STUDENT INFORMATION
QUESTIONNAIRE RESULTS REGARDING FUTURE EDUCATIONAL PLANS

Question/Response	Control		Experimental	
	Pre %	Post %	Pre %	Post %
High School Program				
College Preparatory	40.4	44.2	37.3	35.3
Business-Commercial	11.5	3.8	15.7	9.8
Vocational-Technical	26.9	30.8	19.6	21.6
General	11.5	13.5	21.6	19.6
Other	9.6	7.7	5.9	13.7
Post High School Plans				
Voc.-Tech. School	11.5	11.5	13.7	7.8
Business School	1.9	3.8	0	2.0
Nursing School	1.9	1.9	7.8	5.9
Junior College	11.5	11.5	3.9	7.8
College - University	51.9	50.0	49.0	47.1
Military	1.9	7.7	5.9	2.0
Apprenticeship	1.9	3.8	0	2.0
None	1.9	0	0	2.0
Undecided	15.4	9.6	19.6	23.5
Interest in Vocational Programs				
Interested	82.7	83.2	94.1	84.3
Not Interested	17.3	17.3	5.9	15.7

Program Costs

To provide data relative to approximate costs of an alternative work experience program independent of and supplemental to a functional career exploration/practical arts program in a middle school setting, data were collected from expenditure records of the project being reported and from practical arts classroom teachers representing five practical arts clusters. These data were unique to the setting in which this project was conducted and should be utilized with this in mind.

Table 14 presents basic estimated yearly costs for an alternative work experience program similar to the one being reported. Cost estimates were based upon a pupil population of 500 with each pupil participating in eight days of work experience. The assumption was made that the program would be spread across the majority of an academic school year to accommodate an n-size of 500 and that the classroom

teachers whose pupils would participate at a given time would be available for management purposes when needed.

Tables 15, 16, 17, 18, and 19 reflect approximate operating and initial set-up costs for five practical arts classes offered by Bowling Green Junior High School. Those classes are: power and transportation, construction, manufacturing, distribution and marketing, and agriculture and natural resources. Most practical arts classes at Bowling Green Junior High School were taught seven times per day with a teacher-pupil ratio of 1/25. Class periods were 45 minutes in length.

From the sample of classes drawn, the data reveal the approximate average set-up cost of a practical arts class in Bowling Green Junior High School was $18,300 with a range of $12,500. The power/transportation and construction classes required the most funds for initial set-up. The data show that both areas required approximately $24,000 for set up, whereas, the remaining classes required considerably less.

Approximate yearly expenditures average $10,700 per class with a range of $1,150. Although the power and transportation class was the most expensive in terms of initial set-up, it requires less funds for continued operation than any of the other areas reported ($10,210).

From the data obtained it appears that the yearly cost of a work experience program for middle school pupils, similar to the one being reported, would approximate the average operational costs of two practical arts classes.

TABLE 14

APPROXIMATE OPERATING COSTS
FOR AN ALTERNATIVE WORK EXPERIENCE PROGRAM

Type of Expenditure	Cost
Salaries:	
3/4 Time Program Coordinator (10 1/4 mo. @ 12,132)	9,099*
Full-Time Teacher Coordinator (10 1/4 mo. @ 9,340 for 9 1/4 mo.)	10,352
Sub-Total	19,451
Operating Costs	
Travel (500 pupils)	900
Supplies ($1.25 per pupil: Understanding Interests Workbook; name tags; etc.)	625
Printing	150
OVIS (250 booklets; 500 ans. sheets; 500 summary reports; national and local norms, handling charges)	550
Miscellaneous (postage, etc.)	200
Sub-Total	2,425
TOTAL	21,876

*Based on Average Salary of Public School Counselors in Bowling Green, KY 1973-74 Plus .06 Salary Increment

TABLE 15

APPROXIMATE OPERATING COSTS AND INITIAL SET-UP COSTS
FOR A PRACTICAL ARTS CLASS IN DISTRIBUTION AND MARKETING

Type of Expenditures	A.O.C.*	I.S.C.**
Salaries:		
Full-Time Personnel[1]	9,340	9,340
Other Personnel	--	--
Sub-Total	9,340	9,340
Operating Costs:		
Travel	350	350
Teaching Aids and Supplies	200	200
Miscellaneous	--	--
Sub-Total	550	550
Capital Outlay:		
Equipment	--	1,386
Maintenance of Equipment	550	--
Miscellaneous	--	--
Sub-Total	550	1,386
TOTAL	10,440	11,276

[1]Based on Average Public School Salaries in Bowling Green, Kentucky 1973-74 Plus .06 Salary Increment

*A.O.C. - Approximate Operating Costs

**I.S.C. - Initial Set-Up Costs

TABLE 16

APPROXIMATE OPERATING COSTS AND INITIAL SET-UP COSTS
FOR A PRACTICAL ARTS CLASS IN MANUFACTURING

Type of Expenditures	A.O.C.*	I.S.C.**
Salaries:		
Full-Time Personnel[1]	9,340	9,340
Other Personnel	--	--
Sub-Total	9,340	9,340
Operating Costs:		
Travel	250	250
Teaching Aids and Supplies	--	1,794
Miscellaneous	--	--
Sub-Total	250	2,044
Capital Outlay:		
Equipment	800	7,714
Maintenance of Equipment	700	--
Miscellaneous	--	--
Sub-Total	1,500	7,714
TOTAL	11,090	19,098

[1]Based on Average Public School Salaries in Bowling Green, KY 1973-74 Plus .06 Salary Increment

*A.O.C. - Approximate Operating Costs

**I.S.C. - Initial Set-Up Costs

TABLE 17

APPROXIMATE OPERATING COSTS AND INITIAL SET-UP COSTS
FOR A PRACTICAL ARTS CLASS IN CONSTRUCTION

Type of Expenditures	A.O.C.*	I.S.C.**
Salaries:		
Full-Time Personnel[1]	9,340	9,340
Other Personnel	--	--
Sub-Total	9,340	9,340
Operating Costs:		
Travel	20	20
Teaching Aids and Supplies	1,000	1,500
Miscellaneous	--	--
Sub-Total	1,020	1,500
Capital Outlay:		
Equipment	500	13,120
Maintenance of Equipment	500	--
Miscellaneous	--	--
Sub-Total	1,000	13,120
TOTAL	11,360	23,980

[1]Based on Average Public School Salaries in Bowling Green, KY 1973-74 Plus .06 Salary Increment

*A.O.C. - Approximate Operating Costs

**I.S.C. - Initial Set-Up Costs

TABLE 18

APPROXIMATE OPERATING COSTS AND INITIAL SET-UP COSTS
FOR A PRACTICAL ARTS CLASS IN POWER/TRANSPORTATION

Type of Expenditures	A.O.C.*	I.S.C.**
Salaries:		
Full-Time Personnel[1]	9,340	9,340
Other Personnel	--	--
Sub-Total	9,340	9,340
Operating Costs:		
Travel	20	--
Teaching Aids and Supplies	250	610
Miscellaneous	--	--
Sub-Total	270	610
Capital Outlay:		
Equipment	500	14,400
Maintenance of Equipment	100	--
Miscellaneous	--	--
Sub-Total	600	14,400
TOTAL	10,210	24,350

[1]Based on Average Public School Salaries in Bowling Green, KY 1973-74 Plus .06 Salary Increment

*A.O.C. - Approximate Operating Costs

**I.S.C. - Initial Set-Up Costs

TABLE 19

APPROXIMATE OPERATING COSTS AND INITIAL SET-UP COSTS
FOR A PRACTICAL ARTS CLASS IN AGRICULTURE/NATURAL RESOURCES

Type of Expenditures	A.O.C.*	I.S.C.**
Salaries:		
Full-Time Personnel[1]	9,340	9,340
Other Personnel	--	--
Sub-Total	9,340	9,340
Operating Costs:		
Travel	--	300
Teaching Aids and Supplies	300	2,400
Miscellaneous	300	--
Sub-Total	600	2,700
Capital Outlay:		
Equipment	200	950
Maintenance of Equipment	300	--
Miscellaneous	--	--
TOTAL	10,440	12,990

[1]Based on Average Public School Salaries in Bowling Green, KY 1973-74 Plus .06 Salary Increment

*A.O.C. - Approximate Operating Costs

**I.S.C. - Initial Set-Up Costs

CHAPTER IV

PROJECT EVALUATION

Introduction

A comprehensive evaluation was designed and implemented to objectively critique the operational program. The evaluation design employed consisted of two separate evaluations, one conducted by a team of evaluators from outside the University, and the other conducted by a member of the project staff.

External Evaluation

Two external evaluators, knowledgeable in the area of work experience, cooperative education and career education, met for a period of three days on the campus of Western Kentucky University. During that time the evaluators collected data from various sources of their choosing, including project staff members, experimental group subjects, program sponsors, and junior high school teachers and administrators. A verbal report was presented by the evaluators to the project staff, school administrators, and internal resource personnel prior to completing their visit. A written evaluation (see Appendix K) was submitted by each evaluator to the project director within 30 days of their visit to the University.

Listed below are some of the observations and recommendations included in the written reports from the two evaluators:

A. Observations And Accomplishments

1. The subjects participating in the treatment demonstrated a degree of interest and accomplishment above the general expectations of the sponsors.

2. Communications between sponsors and project staff were excellent.

3. The program provided the pupil with an insight of self and own job interests.

4. Excellent ground-work has been accomplished from which to build.

5. The existing school philosophy in the Bowling Green School System for a strong career education program provides a firm base for such a program.

6. A bank of resource personnel has emerged from this program for future programs and reference.

7. The program provided real life experiences for junior high students through the involvement of professionals, para-professionals, and non-professionals.

8. The maintenance of records and charts by the project staff permitted ease of communication, identification, and modification within the program.

9. A close working relationship between the public school system and the University permitted ease in the implementation of the program.

10. The extension of the career education concept into Western Kentucky University, through The Center For Career and Vocational Teacher Education, provides a source from which such a program can be professionally designed and implemented.

11. The adherence to a clearly delineated process with provisions for change when necessary was found.

12. The booklet "Understanding Interests" was an excellent vehicle for interpreting OVIS results.

13. Further expansion and improvement of the program is already in process.

14. The development of a clearly defined procedure for selection of subjects and outlined responsibilities to be experienced by each participant was found.

B. Recommendations And Problem Areas

1. Vary the time element depending on unique work areas for the best possible work experience.

2. A one to one sponsor-pupil ratio would provide better experiences.

3. More specific pupil information should be provided for respective sponsors.

4. Provide a system whereby a sponsor better understands the limits of his/her role.

5. Establish an information exchange network between junior high teachers and sponsors.

6. Sponsors should be provided with data as to the characteristics, limitations, and capabilities of their ninth grade pupils.

7. Establish a sponsor visitation to the Junior High School to observe the existing Practical Arts Program.

8. Establish a sponsor advisory committee to assist in designing the expansion of the current program.

9. Junior High teacher(s) should be on campus during treatment to act as resource personnel.

10. Sponsors should keep their respective departments advised concerning the program and activities involved.

11. A complete and thorough dissemination of program information throughout the state should be conducted.

Internal Evaluation

One member of the project staff was given the primary responsibility of conducting an internal evaluation of the project.

The CIPP Evaluation Model[12] was used as a basis for data collection and evaluation. "CIPP" is an acronym derived from the first letters of the four basic components or phases of the evaluation model: Context, Input, Process, and Product.

The context phase describes the environment and boundaries in which the program was conducted, as well as stipulating the goals and objectives of the project. The input phase describes resources utilized to design, develop, and implement the program. The process phase gives a descriptive account of the implementation of the program while the product phase describes collection of data for measuring effectiveness of the program and the statistical analysis of that data.

Data were collected during the product phase of the evaluation by means of a series of standardized instruments and a series of survey instruments developed by the project staff. The standardized instruments consisted of the Ohio Vocational Interest Survey (OVIS), Career Maturity Inventory (CMI), and the School Sentiment Index (SSI), the results of which have been discussed previously.

Five survey instruments were developed to collect data from the experimental group subjects, their parents, their sponsors, their teachers, and their school administrator and counselor. All survey instruments followed the same basic format. The instruments consisted of a number of statements and response choices pertaining to the program and a series of open-ended questions for non-directive feedback. The Likert Method was employed for the response choices appearing on the survey instruments. Responses were scored on a scale from one to four, with the higher response being the more favorable toward the program. The results of the six survey instruments are reported in Tables 20 through 25.

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[12]Daniel L. Stufflebeam, et. al. Educational Evaluation And Decision Making. (Itasca, Illinois: Peacock Publishers, Inc., 1971).

Program Evaluation By Pupils

Two evaluation surveys, one being administered after the completion of each cycle, were completed by the pupils participating in the treatment phase of the program. The results of these surveys are presented in Tables 20 and 21.

The results presented in Table 20 (Cycle I) reveal a very favorable reaction to the program by the group as a whole. There appears to have been a little difficulty in understanding OVIS results with the aid of the "Understanding Interest" workbook (item 2), as well as understanding how this program supplemented classes being taken at the Junior High School (item 13). However, scores still remained relatively high on both of these items. Particularly high scores are noted on items 7, 8, and 12.

Table 21 presents results of the survey administered following the completion of Cycle II. The results indicate a continued favorable reaction to the program. The lowest mean score (item 17) indicates that several members of the group did not convey to their teacher what they did while on campus, but the number of those who did remained relatively high. Items 7 and 8 elicited the highest mean scores from the survey, indicating that the subjects felt that the program would be beneficial for other ninth grade pupils and that their experiences at Western Kentucky University were enjoyable.

Program Evaluation By Sponsors

Table 22 reveals the results of a sponsor evaluation survey conducted immediately following the completion of Cycle II. The survey was mailed to each major sponsor (total 48) and to five additional individuals who assisted the major sponsors during the program. In all, 53 surveys were mailed. Thirty-eight (72%) were returned.

While the results found in Table 22 are favorable to the program, opinions and ideas about the program varied considerably. Items 4, 11, 17, and 20 received the lowest mean scores. Of particular interest are items 17 and 20, where sponsors indicated that an information exchange network with the Junior High School teachers and a visit to the Junior High School would have been beneficial. Items 1, 2, 3, and 16 received the highest scores on the survey, indicating that the sponsors had an adequate understanding of the program (items 1 and 2) and that the students were well behaved (items 3 and 16).

Program Evaluation By Parents

Immediately following the completion of Cycle II, a parent survey was mailed to the parent(s) of each ninth grade pupil who participated in the treatment phase of the program. A total of 112 surveys were mailed with 54 (48%) being returned. The parent survey results are presented in Table 23. Consistent with the sponsor and two student surveys, response scores given were generally high, indicating a favorable attitude

TABLE 20

CYCLE I STUDENT QUESTIONNAIRE

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
1. The first day at Western helped me to understand what this program is all about.		3.15	29	70	5	1	2	92.5	5.6
2. On the first day I learned a lot about my interests from the way the OVIS test was explained and by using the workbook I was given.		2.94	23	61	18	3	2	78.5	19.6
3. The things Mr. Niva told us about safety at Western were important.		3.25	39	61	4	1	2	93.4	4.6
4. The films I saw helped me understand different careers.		3.10	27	69	8	1	2	89.7	8.4
5. The films I saw were a waste of time.	(N)**	3.16	1	13	53	38	2	13.0	85.0
6. I have learned a lot about different jobs and careers since coming to Western.		3.29	44	51	11	1	1	88.8	11.2
7. This kind of program would be a waste of time for other ninth grade students.	(N)	3.56	3	--	38	66	1	2.8	97.2
8. I have enjoyed my experiences at Western.		3.56	69	33	3	--	2	95.3	2.8
9. My career sponsors at Western have been helpful.		3.39	50	49	8	--	1	92.5	7.5

TABLE 20 - Continued

Item		Mean	Absolute Frequency SA	A	D	SD	NR	Cumulative Frequency (%) SA+A	D+SD
10. My career sponsors at Western are not interested in me.	(N)	3.35	1	8	51	47	-	8.4	91.6
11. My career sponsors at Western want me to learn as much as I can about their careers.		3.33	43	57	6	1	-	93.5	6.5
12. I DO NOT like my career sponsors at Western.	(N)	3.49	1	--	52	54	-	0.9	99.1
13. It is hard for me to see what this program has to do with the classes I am taking at the Junior High.	(N)	2.76	9	21	57	19	1	28.0	71.1
14. I understand why I was placed in the career areas in which I am working/ exploring.		3.04	22	70	12	3	-	86.0	14.0
15. My career sponsor(s) have let me do things instead of just watching.		3.08	40	45	14	7	1	79.5	19.6
16. I talk to my parents about the things I do at Western.		3.18	37	56	10	4	-	86.9	13.0
	N = 107								

*No Response
**Negative Question

TABLE 21

CYCLE II STUDENT QUESTIONNAIRE

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
1. I learned something new about the world of work.		3.42	56	40	8	2	-	90.5	9.4
2. Four days in one area are too many.	(N)**	3.24	6	11	41	48	-	16.1	84.0
3. This program has helped me to better understand what kind of work I would like to do.		3.34	51	45	6	3	1	90.6	8.5
4. I learned what skills are necessary to get a job in the area I explored.		3.11	35	51	17	3	-	81.1	18.8
5. My experiences helped me to see why it is important to stay in school.		3.28	48	43	13	1	1	85.9	13.2
6. I have learned a lot about different jobs and careers since coming to Western.		3.27	43	52	9	1	1	89.7	9.4
7. This kind of program would be good for other ninth grade students.		3.69	76	27	3	--	-	97.2	2.8
8. I have enjoyed my experiences at Western.		3.55	67	34	2	2	1	95.3	3.8
9. My career sponsors at Western have been helpful.		3.35	51	44	8	3	-	89.6	10.3

TABLE 21 - Continued

Item	Mean	Absolute Frequency SA	A	D	SD	NR	Cumulative Frequency (%) SA+A	D+SD
10. My career sponsors at Western were interested in me.	3.15	39	48	15	4	-	82.1	18.0
11. My career sponsors at Western wanted me to learn as much as I could about their careers.	3.26	49	40	13	3	1	83.9	15.1
12. I liked my career sponsors at Western.	3.26	48	45	9	1	3	87.8	9.4
13. This program has helped me to understand why my classes at the Junior High are important.	3.02	33	51	16	3	3	79.2	17.9
14. I understand why I was placed in the career areas in which I am working/exploring.	3.02	39	40	18	8	1	74.5	24.5
15. My career sponsor(s) have let me do things instead of just watching.	3.11	55	24	12	14	1	74.5	24.5
16. I talk to my parents about the things I did at Western.	3.24	47	45	8	4	2	86.8	11.3
17. I talked to my teachers about the things I did at Western.	2.71	20	52	19	13	2	68.0	30.2

TABLE 21 - Continued

Item	Mean	Absolute Frequency SA	A	D	SD	NR	Cumulative Frequency (%) SA+A	D+SD
18. The program staff members (other than sponsors) were helpful.	3.42	56	42	5	2	1	92.4	6.6

N = 106

*No Response
**Negative Question

TABLE 22

SPONSOR QUESTIONNAIRE

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
1. I understand the purpose of this program.		3.579	23	14	1	--	-	97.3	2.6
2. The information I received concerning the program was adequate.		3.368	19	17	--	1	1	94.7	2.6
3. The student(s) I sponsored were difficult to control.	(N)**	3.421	--	1	12	23	2	2.6	92.1
4. I could have offered the students better experiences if they had come on different days.	(N)	2.684	4	9	16	8	1	34.2	63.2
5. I could have offered the students better experiences if they had come at a different time of the day.	(N)	2.842	2	5	20	9	2	18.5	76.3
6. My type of work allows me to offer good experiences for the students.		3.211	13	22	2	--	1	92.1	5.3
7. It is hard for me to see what benefit the program has for Junior High School students.	(N)	3.342	--	4	17	17	-	10.5	89.4
8. My superior was supportive of this program.		3.132	17	17	--	--	4	89.4	----

TABLE 22 - Continued

Item		Mean	Absolute Frequency SA	A	D	SD	NR	Cumulative Frequency (%) SA+A	D+SD
9. There was good communication between project staff and sponsors.		3.342	16	20	1	1	-	94.7	5.2
10. I could have offered better experiences if I had fewer students assigned to me.	(N)	2.974	1	3	22	10	2	10.5	84.2
11. I think two days per career area is more effective than four days.	(N)	2.342	5	14	12	5	2	50.0	44.8
12. My students seemed bored after the second day.	(N)	2.895	1	6	19	10	2	18.4	76.3
13. Four days is not enough time for the student to have a good understanding of my career area.	(N)	2.895	1	9	17	10	1	26.3	71.0
14. My students actually helped me with my work.		2.763	5	23	6	4	-	73.7	26.3
15. This program should be continued on a regular basis.		3.158	14	20	2	--	2	89.4	5.3
16. My students were polite.		3.421	19	18	--	--	1	97.4	----
17. An information exchange network should be developed between career sponsors and junior high teachers.	(N)	1.579	9	21	3	--	5	79.0	7.9

TABLE 22 - Continued

Item		Mean	Absolute Frequency SA	A	D	SD	NR	Cumulative Frequency (%) SA+A	D+SD
18. My students demonstrated a high degree of interest.		3.105	10	23	4	1	-	86.8	13.1
19. I am supportive of this program.		3.395	20	16	1	1	-	94.7	5.2
20. It would have been beneficial for me to have visited the Junior High School to see their career education program in operation.	(N)	2.184	5	19	12	1	1	63.2	34.2

N = 38

*No Response
**Negative Question

toward the program by the subjects' parents. Items 1, 8, 10, and 13 received particularly high scores varifying that the subjects related to their parents about what they did in the program (item 1) and that the parents believed career exploration at this grade level was important and beneficial (items 8, 10, and 13).

Items 5 and 6 received the lowest scores of the survey. Item 5, as was written, may have involved a semantical problem. The item was intended to be interpreted as a "fear for the safety of the child," as opposed to a more general parental concern. After a careful review of parental response to the item as written, it is believed the item was interpreted by many parents in the more general sense.

Program Evaluation By Teachers

A teacher evaluation survey was completed by the teachers of the experimental group subjects immediately following the completion of Cycle II. The results of the teacher survey appear in Table 24. As expected from a school system where career education is central in its philosophy of education, many of the mean response scores were very favorable. Of particular interest are the responses to items 13, 20, 21, and 26. The teachers, as did the sponsors, indicated a need for an information exchange network between Junior High teachers and career sponsors (items 13 and 26) as well as more involvement of the teachers in the program (item 21). Item 20 reveals the teachers were unanimous in indicating that academic performance by the experimental subjects did not improve during the treatment phase of the program.

Program Evaluation By Principal And Counselor

Following the completion of Cycle II an evaluation survey was completed by the principal and guidance counselor of the experimental subjects. The results of the survey are presented in Table 25. Again, the responses indicate strong support for the program.

Non-Directive Feedback

Each of the six evaluation survey instruments also included one or more open-ended questions for non-directive feedback. The responses to the open-ended questions at the end of the two student surveys were greatly varied and undoubtedly candid. It was not surprising to find the expression "fun" appearing repeatedly in the comments from both surveys. Likewise, many of the negative experiences expressed by the pupils gave the impression they were perceived as such because they were not "fun." An impression of tiring of the program was given by a few of the students in the Cycle II survey. However, the majority of comments were positive and supportive of the program.

Comments from the sponsor surveys were generally favorable toward the program with several suggestions which would be convenient for a particular sponsor or work area in the future. The suggestions of a variable

TABLE 23

PARENT QUESTIONNAIRE

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
1. My child talked to me about the things he/she did at Western Kentucky University.		3.574	31	23	--	--	-	100	----
2. My child enjoyed his/her experience at Western Kentucky University.		3.463	30	21	1	2	-	94.5	5.6
3. I think the things my child did at Western Kentucky University were important.		3.315	24	25	3	2	-	90.7	9.3
4. Overall, I feel my child has benefited from this program.		3.352	25	25	2	2	-	92.6	7.4
5. I had feelings of concern about my child being on the campus of Western Kentucky University.	(N)**	2.648	6	16	15	15	2	40.7	55.6
6. My child seems more interested in school since the program began.		2.611	7	27	14	4	2	63.0	33.3
7. My child has talked about future occupational goals since the program began.		2.889	10	31	10	3	-	75.9	24.1
8. Exploring different careers is a waste of my child's time.	(N)	3.630	--	--	16	37	1	----	98.1

TABLE 23 - Continued

Item		Mean	Absolute Frequency SA	A	D	SD	NR	Cumulative Frequency (%) SA+A	D+SD
9. I understand what the work experience program was about and what it was trying to do.		3.204	15	36	2	1	-	94.5	5.6
10. I think exploring careers makes school more meaningful for my child.		3.500	29	24	--	1	-	98.1	1.9
11. I think schools should stick only to the basic subjects of reading, writing and arithmetic.	(N)		--	--	19	34	1	----	98.2
12. The program at Western Kentucky University was a waste of time.	(N)	3.444	2	1	18	32	1	5.6	92.6
13. I think the ninth grade is too early for students to begin exploring careers.	(N)	3.519	--	2	18	33	1	3.7	94.4
14. I would like to know more about the program.		2.889	14	30	4	2	4	81.5	11.1
15. I think this program should be a regular part of the ninth grade program.		3.185	21	29	--	1	3	92.6	1.9
16. I feel my child was really interested in the career areas he/she explored while on Campus.		3.037	17	30	2	2	3	87.1	7.4

N = 54

*No Response
**Negative Question

TABLE 24

TEACHER QUESTIONNAIRE

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
1. I have had fewer discipline problems since this program was initiated.		2.75	--	3	1	--	-	75	25
2. My students benefited from the work experience program.		3.50	2	2	--	--	-	100	--
3. The program interfered too much with other studies.	(N)**	3.50	--	--	2	2	-	--	100
4. The program will be of value to the student as he enters high school and selects courses of study.		3.75	3	1	--	--	-	100	--
5. The students seemed to enjoy the program.		3.25	1	3	--	--	-	100	--
6. The students talked positively about what they did in their work experience stations.		3.00	1	3	--	--	-	100	--
7. The work experienced on Campus by the students was representative of the real world of work.		3.00	--	4	--	--	-	100	--
8. I have observed a general improvement in student attitude toward school since the program started.		2.75	--	3	1	--	-	75	25

TABLE 24 - Continued

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
9. I was not provided with enough information about the program.	(N)	3.25	--	--	3	1	-	--	100
10. There were poor communications between the project staff and the teachers.	(N)	3.50	--	--	2	2	-	--	100
11. Students were placed in career areas which seemed appropriate for the individual.		3.00	--	4	--	--	-	100	--
12. This program should be a regular part of the ninth grade curriculum.		3.25	1	3	--	--	-	100	--
13. Work experience sponsors (University employees) and satellite teachers should develop an exchange information system for student growth and improvement.	(N)	2.00	--	2	--	--	-	100	--
14. Ninth grade students are too young to participate in meaningful work experiences.	(N)	3.75	--	--	1	3	-	--	100
15. This program made school more relevant for the student.		3.00	--	4	--	--	-	100	--
16. This program could easily be adapted to another junior high school setting.		3.50	2	2	--	--	-	100	--
17. Students should explore more than two career areas.	(N)	2.75	--	1	3	--	-	25	75

TABLE 24 - Continued

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
18. Students can sufficiently explore career areas without having to go off the Junior High School grounds.	(N)	3.25	--	--	3	1	-	--	100
19. I feel that most parents supported this program.		3.50	2	2	--	--	-	100	--
20. The academic performance of my students has improved since the initiation of this program.		1.00	--	--	--	4	-	--	100
21. I think the teachers should have been more involved in the program.	(N)	2.25	--	3	1	--	-	75	25
22. I am supportive of this program.		3.75	3	1	--	--	-	100	--
23. This program has helped the students to see a need to remain in school.		3.75	3	1	--	--	-	100	--
24. I feel this program has the support of the school administrators.		3.75	3	1	--	--	-	100	--
25. Ninth grade students are too immature for this type program.	(N)	3.25	--	--	3	1	-	--	100
26. I feel there should be more communication between the career sponsors and the teachers.	(N)	2.25	1	1	2	--	-	50	50

TABLE 24 - Continued

Item		Mean	Absolute Frequency SA	A	D	SD	NR*	Cumulative Frequency (%) SA+A	D+SD
27. It would have been better for me if the program had been conducted on a different day.	(N)	3.75	--	--	1	3	-	--	100
28. There were many students who were NOT happy with the area in which they were placed.	(N)	2.75	--	1	3	--	-	25	75
29. I had an understanding of the work experience in which my students participated.		3.25	1	3	--	--	-	100	--
30. Satellite teachers should be available on the University Campus during student work experience days.	(N)	3.00	--	--	4	--	-	--	100

N = 4

*No Response
**Negative Answer

TABLE 25

ADMINISTRATOR/COUNSELOR QUESTIONNAIRE

Item		Administrator (Principal)				Counselor (Guidance)			
1. The students benefited from the work experience program.		(SA)	A	D	SD	(SA)	A	D	SD
2. The program will be of value to the student as he enters high school and selects courses of study.		(SA)	A	D	SD	(SA)	A	D	SD
3. The work experienced on Campus by the students was representative of the real world of work.		(SA)	A	D	SD	SA	(A)	D	SD
4. I was not provided with enough information about the program.	(N)*	SA	A	D	(SD)	SA	A	(D)	SD
5. There were poor communications between the project staff and myself.	(N)	SA	A	D	(SD)	SA	A	(D)	SD
6. This program should be a regular part of the ninth grade curriculum.		(SA)	A	D	SD	(SA)	A	D	SD
7. Ninth grade students are too young to participate in meaningful work experiences.	(N)	SA	A	D	(SD)	SA	A	D	(SD)
8. This program made school more relevant for the student.		(SA)	A	D	SD	(SA)	A	D	SD

TABLE 25 - Continued

Item		Administrator (Principal)				Counselor (Guidance)				
9. Students should explore more than two career areas.	(N)	SA	A	(D)	SD	SA	A	D	SD	**
10. Students can sufficiently explore career areas without having to go off the Junior High School grounds.	(N)	SA	A	(D)	SD	SA	A	(D)	SD	
11. I feel that most parents supported this program.		SA	(A)	D	SD	SA	(A)	D	SD	
12. I am supportive of this program.		(SA)	A	D	SD	(SA)	A	D	SD	
13. This program has helped the students to see a need to remain in school.		(SA)	A	D	SD	(SA)	A	D	SD	
14. I feel this program has the support of the teachers.		(SA)	A	D	SD	(SA)	A	D	SD	
15. Ninth grade students are too immature for this type program.	(N)	SA	A	D	(SD)	SA	A	D	(SD)	
16. It would have been better for me if the program had been conducted on a different day.	(N)	SA	A	(D)	SD	SA	A	(D)	SD	
17. Satellite teachers should be available on the University Campus during student work experience days.	(N)	SA	(A)	D	SD	SA	(A)	D	SD	

*Negative Question **"Some may need to explore several career areas before they find themselves--others who are very sure might need only one."

length program, to avoid the split session around lunch, and two days work experience of eight hours each (per cycle) rather than four days were given particular consideration.

Comments from parents mainly demonstrated the parents' and/or childs' reaction to the program, while a few program changes were suggested. Some design changes suggested were: shorter periods of time on campus, provide literature to pupils and parents about the career area(s) to be explored, variable length cycles (unique to each work area), and more areas to explore.

Comments from the teachers yielded valuable insight concerning the program. Some of the suggestions included more teacher involvement in pupil assignment to work areas, a sponsor evaluation of each pupil in his or her area, and greater teacher/sponsor interaction. It should be noted here that one recommendation of the advisory committee was that pupils not be formally evaluated.

Comments from the principal and guidance counselor included a reiteration that teachers as well as the guidance counselor be more involved in the placement of the pupils in work areas.

Evaluative Conclusions

From the data collected via the standardized and survey instruments as well as personal observations, a final section was written in the internal evaluation presenting the conclusions and recommendations of the internal evaluator. Looking specifically at the stated objectives of the project and the analysis of results from the standardized and survey instruments, the following have been concluded:

1. A work experience program for middle school students can and has been designed, developed, and implemented.

2. Information and procedures for the development and improvement of work experience programs has been compiled and is provided in the final report of the project.

3. While the statistical analysis of standardized instruments did not determine that a "hands-on" work experience program for middle school students in Bowling Green, Kentucky had an overwhelming affect on the students' career maturity attitude toward school and vocational interests, the results from the survey instruments do give some indication of this. One possible problem which may have affected the statistical results is that a progressive career education program had previously been developed throughout the Bowling Green School System. This may have caused difficulties in truly comparing experimental and control groups relative to the influence of a work experience program.

4. A model for working with cooperating agencies (Sponsors) that provides occupational experiences for middle school pupils was developed.

5. A procedure for placement and supervision of students in a work experience program was developed.

6. A model for a work experience plan to be used by students and sponsors was developed.

7. A realistic work experience, in most instances, was provided for the students.

8. Knowledge of a particular job and requirements for employment were provided in most instances.

9. Discovering the relevancy of school with respect to future occupational goals was not indicated on the two student surveys as strongly as expected. Indexes relative to understanding the importance of remaining in school (completing high school) appeared to be considerably higher than indexes concerned with understanding the relevance of particular subject courses being taken.

10. The need of proper training in pursuing a particular job was revealed to the students.

11. An awareness of career opportunities was developed.

12. Increased motivation toward the world of work was not determined.

13. Awareness of satisfaction or dissatisfaction from a particular work experience was developed.

14. Improvement of attitude toward work was not determined.

Evaluative Recommendations

The following recommendations were based on observations and data obtained from the project:

1. The Bowling Green Junior High School is atypical with respect to the following:

   a. A progressive attitude toward and incorporation of the concept of career education exists throughout the school system.
   b. An organizational structure reflecting equal pupil stratification with respect to elementary feeder school, sex, race, and academic achievement exists within each satellite.
   c. An organizational structure exists which permits working with a large unit of the student body with a minimum amount of disturbance to the remaining school environment.

   In view of the above, it is believed that more significant treatment effects may be found in a more typical school system.

2. A smaller number of students assigned to each sponsor would provide better work experiences.

3. A greater amount of control over and contact by the project staff with individuals recruited by sponsors to assist in providing work experience would be beneficial.

4. A greater emphasis in the necessity for all sponsors (and their assistants) to attend the Sponsor Orientation Meeting should be considered.

5. The Sponsor Orientation Meeting should include more information pertaining to the Practical Arts Program at the Junior High School.

6. If a pupil's stated area of vocational interest is different from either his/her Practical Arts Program or as indicated by the OVIS, substitution should be permitted.

7. Work cycles should be restructured, possibly offering two days work experience in each of three or four different work areas.

8. To assure a better understanding of OVIS results, the OVIS Interpretation Seminar during Orientation should be presented in small groups (cells) of no more than 10 pupils per cell.

9. Greater teacher involvement, particularly in work area placement, should be considered.

10. More guidance counselor involvement in all aspects of the program is needed.

11. There was some doubt that the Career Maturity Inventory effectively measured career maturity. It may be desirable to examine alternative tests for measuring this factor.

12. Greater program information should be provided to the subject's parents.

13. Sponsors should insure, prior to volunteering for participation, that sufficient work experiences can be provided each pupil in his/her particular area for the time allotted.

14. If a sponsor feels he/she cannot provide an adequate work experience after the program has begun, every attempt should be made to find a substitute sponsor as quickly as possible.

15. Subjects' teachers should participate in the sponsor orientation program to communicate an understanding of ninth grade pupils.

16. Arrangements should be made for interested sponsors to observe the Practical Arts Program at the Junior High School.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The research reported herein was a study to determine if an alternative work experience program could be developed and implemented at the middle/junior high school level, and if so, what effect such a program would have on the career maturity, attitude toward school, and vocational interests of participating pupils.

Conclusions

All conclusions were based upon the development and implementation of a work experience program and the results obtained from testing its effect on participating pupils. Consequently, results of the statistical analyses reflect only the population studied. However, the researcher is of the opinion that generalizations can be made to middle/junior high school pupils with similar characteristics and educational backgrounds, but caution must be exercised in making generalizations to pupils within school settings that do not offer a career-oriented curriculum.

The conclusions which follow were based upon actually developing, refining, implementing and testing an alternative work experience program for middle school pupils. The conclusions were:

1. An alternative work experience program was developed and implemented for middle/junior high school pupils. The program had the capabilities of providing pupils with work experiences in all occupational clusters. It managed many of the barriers that prohibit employment of underage pupils, provided work experiences in a small geographic area, and managed a large number of student workers at one time.

2. The effect of an alternative work experience program on the career maturity, attitude toward school, and vocational interests of ninth grade pupils was determined.

3. Information and procedures for the design and improvement of a work experience program for middle/junior high school pupils were developed.

The following conclusions were based upon results obtained from the Career Maturity Inventory. The Career Maturity Inventory was administered to samples of both the experimental and control groups in an attempt to assess the effects of the work experience program on the career maturity of experimental group members. The conclusions were:

1. No significant difference was found between the experimental and control groups relative to the maturity of attitudes

considered important to realistic career decision making. It was concluded that experimental pupils' involvement in the choice process, orientation toward work, independence in decision making, preference for career choice factors (extent to which one bases his/her choice upon a particular factor), and conceptions of the choice process (extent to which one has an accurate or inaccurate conception about career decision making) were no different following participation in a work experience program than control pupils'.

2. Ninth grade females (in both the experimental and control groups) were significantly more mature than ninth grade males (in both the experimental and control groups) relative to the maturity of attitudes considered important to realistic career decision making.

3. No significant difference was found between the experimental and control groups relative to the variable "self-appraisal in the process of career decision making." Even though experimental pupils demonstrated themselves to be better self appraisers than control pupils, it was concluded that ninth grade work experience participants were not significantly better able to appraise personal job-related capabilities than were ninth grade pupils who did not participate in a work experience program.

4. Ninth grade females in both the experimental and control groups were significantly better able to appraise their personal job-related capabilities than were ninth grade males in either group. Experimental females demonstrated themselves to be the most competent self-appraisers, whereas, control males were concluded to be the least competent.

5. No significant difference was found between the experimental and control groups relative to accuracy and extent of job knowledge (occupational information). It was concluded, therefore, that the work experience program did not significantly increase the participants' general knowledge of the world of work, as assessed by the Career Maturity Inventory.

6. Ninth grade females in both the experimental and control groups demonstrated significantly more competence relative to the accuracy and extent of their job knowledge than did their male counterparts.

7. No significant difference was found between the experimental and control groups in their ability to relate self to work (goal selection). It was concluded, therefore, that competence in goal selection was not significantly enhanced for ninth grade pupils who participated in the work experience program.

8. Ninth grade females in both the experimental and control groups demonstrated significantly more competence in their ability to relate self to work (goal selection) than did their male counterparts.

9. As a consequence of analyzing the results obtained from the Attitude Scale and three subsections from the Competence Test of the Career Maturity Inventory, it was concluded that the work experience program reported herein did not significantly affect the career maturity of the ninth grade participants.

The following conclusions were based upon results obtained from the School Sentiment Index. The School Sentiment Index was administered to samples of both the experimental and control groups in an attempt to assess the effect of the work experience program on the pupil participants' attitude toward school. The conclusions were:

1. Although the data reveal that pupils who participated in the work experience program possessed a better comprehensive attitude toward school than pupils who did not participate, the difference between groups was not statistically significant to an acceptable level.

2. A significant difference was found between the experimental and control groups relative to their attitude toward learning. Pupils who participated in the work experience program demonstrated a significantly better attitude toward learning. It was concluded that participation in the work experience program resulted in the difference between groups.

3. No significant difference was found between the experimental and control groups relative to their attitude toward school structure and climate. It was concluded, therefore, that participation in the work experience program did not significantly enhance participants' attitude toward school structure and climate.

4. No significant difference was found between the experimental and control groups relative to attitude toward peers. It was concluded, therefore, that participation in the work experience program did not significantly affect participants' attitudes toward their classmates.

5. Even though pupils who participated in the work experience program revealed a better attitude toward the "notion of school," than those who did not participate, the difference between groups was not acceptably significant.

6. Pupils who participated in the work experience program demonstrated a better attitude toward their teachers, than did pupils who did not participate. However, the difference between groups was not acceptably significant.

The following conclusions were based upon results obtained from the Ohio Vocational Interest Survey. The instrument was administered to experimental and control pupils in an attempt to assess vocational interest patterns. The conclusions were:

1. No significant difference was found within the experimental or control group between the strength of pupils highest assessed pretest interest areas and highest assessed posttest interest areas. It was concluded, therefore, that strength of interest (excluding concern for any job area) did not significantly increase or decrease for pupils who participated in the work experience program.

2. A significant difference within both the experimental and control groups was found when the strength of the highest pretest interest area was compared to its strength on the posttest. It was concluded that pupils who both participated and did not participate in the work experience program demonstrated a significant change in degree of interest for an initially assessed high interest area.

3. No significant difference between the experimental and control groups was found when the strengths of high pretest interest areas were compared to their posttest strengths. It was concluded that the pupils who participated in the work experience program did not exhibit a significantly higher degree of vocational interest crystallization than pupils who did not participate.

4. Pupils who participated in the work experience program demonstrated, over time, more change in degree of interest for initially assessed high interest areas than pupils who did not participate. It was concluded, therefore, that the work experience program provided experimental group members with data and experiences from which to make a more realistic appraisal of job areas as they relate to self.

5. The percentage of control group pupils who were undecided about post-high school plans decreased between pre and posttesting; however, the percentage of undecided experimental group members increased. It was concluded that possibly pupils who participated in the work experience program were undergoing a more thorough reassessment of future educational plans at posttesting than were control group members.

6. The percentage of control group pupils that planned to attend a vocational-technical school following high school remained the same between pre and posttesting, whereas, almost 50 percent fewer experimental group pupils planned to attend a vocational-technical school at posttesting than had indicated such at pretesting. One conclusion reached was that the decreased interest in attending a vocational-technical school was a function of increased exposure, during the work experience, to two and four year programs offered within the university environment.

The following conclusions were based upon evaluative surveys of pupils who participated in the work experience program, their parents,

their teachers, their school principal and counselor, and their work experience sponsors. The conclusions were:

1. Approximately 90 percent of the participating pupils indicated they learned a great deal about different jobs and careers as a result of the work experience program.

2. Approximately 95 percent of the participating pupils indicated that they enjoyed their work experiences at Western Kentucky University. The same percentage of responding parents indicated their children enjoyed the experiences provided.

3. Approximately 75 percent of the participating pupils indicated that they perceived the relationship between the work experience program and the curriculum offered at their junior high school.

4. Approximately 87 percent of the participating pupils indicated that they discussed their work experiences with their parents, whereas, 100 percent of parent respondents indicated that their children discussed those experiences with them.

5. Approximately 60 percent of the participating pupils indicated that they discussed their work experiences with their classroom teachers.

6. Approximately 91 percent of the responding parents whose children participated in the work experience program felt the experiences provided were important, and 93 percent indicated that their children benefited from them.

7. Approximately 63 percent of the responding parents whose children participated in the work experience program indicated that, as a consequence of the program, their children seemed more interested in school.

8. Approximately 80 percent of the responding parents whose children participated in the work experience program indicated that, as a consequence of the program, their children talked more about future occupational goals.

9. Approximately 93 percent of the responding parents whose children participated in the work experience program and all of the cooperating satellite teachers felt that such a program should be part of the regular junior high school curriculum.

10. Three of the four satellite teachers whose pupils participated in the work experience program indicated that fewer discipline problems occurred following the program's implementation.

11. All of the satellite teachers whose pupils participated in work experiences felt that their pupils benefited and indicated that the program did not interfere with the ongoing curriculum.

12. All of the satellite teachers whose pupils participated in the work experience program felt that their pupils would be better able to make curricular decisions as they entered high school.

13. All of the satellite teachers whose pupils participated in the work experience program felt that the program was transportable to other junior high school settings.

14. All of the satellite teachers whose pupils participated in the work experience program indicated that the academic performance of their pupils did not improve as a consequence of the program.

15. All of the cooperating satellite teachers, the Junior High School principal and the ninth grade counselor indicated that the work experiences provided the pupils were representative of the world of work.

16. Pupils participating in the work experience program demonstrated a degree of interest and accomplishment above the general expectations of their work experience sponsors.

17. Ninety-seven percent of responding work experience sponsors indicated that they understood the purpose of the work experience program.

18. Ninety-two percent of responding work experience sponsors indicated that ninth grade pupils were not difficult to control.

19. Ninety-two percent of responding work experience sponsors indicated that their unique jobs were such that good work experiences could be provided for ninth grade pupils.

20. Ninety-five percent of responding work experience sponsors indicated that they were supportive of the program and 89 percent felt it should be continued on a regular basis.

The following conclusions were based upon expenditure records of the project being herein reported and from data gathered from practical arts teachers in Bowling Green, Kentucky. The conclusions were:

1. Approximate average set up costs for a practical arts class was $18,300. Yearly expenditures (following initial set up) averaged $10,700 per class, with a range of $1,150.

2. Of the sample drawn, the practical arts class in power and transportation was the most expensive to initially set up, but required less funds for continued operation.

3. The yearly cost of a work experience program for 500 middle school pupils, similar to the one reported herein, would approximate the average operational costs of two practical arts classes.

Recommendations

The following recommendations formulated by the project director were based upon observations made during the study and the findings of the study. The recommendations are:

1. The study reported herein should be replicated utilizing a middle or junior high school that does not offer a career oriented curriculum. Such a replication should provide valuable data regarding treatment effects in a more typical educational setting.

2. The study reported herein should be replicated utilizing other large multi-unit agencies as "prime employers" for middle school pupils. It is specifically recommended that the model be implemented and tested on a military installation where opportunities for work experience in many or all job clusters appear feasible.

3. State departments of education, local school boards, and junior/middle school curriculum specialists should emphasize work experience programs as a major vehicle for facilitating sound curricular decision making on the part of pupils making the transition from middle/junior high school to high school.

4. State departments of education, local school boards, and junior/middle school curriculum specialists should emphasize the importance of providing work experience for middle/junior high pupils as a part of and related to the total educational program at that level.

5. Middle/junior high school pupils should be encouraged and provided with opportunities to participate in a variety of well developed work experience programs to facilitate realistic self-appraisal, improve decision-making skills and further develop vocational interest patterns.

6. Work experience programs for middle/junior high youth should possess a strong vocational guidance component, such that pupils are provided with opportunities to verbalize, interpret, and internalize experiences encountered in the work setting.

7. Efforts should be undertaken to identify other multiunit agencies that have the potential for and desire to provide a variety of work experiences for large numbers of pupil workers at one time.

8. Longitudinal research investigations should be conducted to assess and follow the career development of youth who have participated in work experience programs as compared to youth who have not had such experiences.

APPENDIX A

PROGRAM ADVISORY COMMITTEE

ADVISORY COMMITTEE FOR AN
ALTERNATIVE WORK EXPERIENCE/CAREER EXPLORATION PROGRAM
FOR NINTH GRADE PUPILS

External Resource Personnel

Robert Gibson, Chairman, Department of Guidance and Counseling, Indiana University

Gail Henon, President, Bowling Green Junior High School Parent-Teacher Organization, Bowling Green, Kentucky

Sarah H. Laws, Principal, Bowling Green Junior High School, Bowling Green, Kentucky

Ralph Mason, Chairman, Department of Business-Distributive Education and Office Administration, Indiana State University

Otto Mattei, Director, Career Education, Bowling Green School System, Bowling Green, Kentucky

Douglas McKinley, Director, Practical Arts Education Unit and Committeeman, Kentucky Career Education Committee, Kentucky State Department of Education, Frankfort

Robert H. White, Executive Director, South Carolina State Advisory Council on Vocational Education

University Resource Personnel

Wayne Ashley, Assistant Professor, Counselor Education, Western Kentucky University

Emmett Burkeen, Head, Counselor Education, Western Kentucky University

Franklin Conley, Head, Industrial Education and Technology, Western Kentucky University

Mary Edwards, Departmental Secretary, Office of Educational Research, Western Kentucky University

University Resource Personnel (cont.)

William A. Floyd, Head, Home Economics and Family Living, Western Kentucky University

William E. Leonard, Associate Professor, Speech and Theatre and Director, University Theatre, Western Kentucky University

Clayton Riley, Director, Distributive Education, Western Kentucky University

James Sanders, Assistant Professor, Media Services, Western Kentucky University

Sharon J. Savage, Instructor, Dental Hygiene, Western Kentucky University

Norma J. Schira, Coordinator, Health Occupations Education, Western Kentucky University

Hollie Sharpe, Head, Business Education and Office Administration, Western Kentucky University

As the program under consideration is being administered by Western's Center for Career and Vocational Teacher Education, the following staff of the Center will participate in meeting activities:

Norman P. Ehresman, Director, Center for Career and Vocational Teacher Education, Western Kentucky University

Larry Conner, Research Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University

Vincent J. Feck, Associate Professor, Occupational Education, Western Kentucky University

*Judy Given, Practical Arts Instructor and Teacher Coordinator, Bowling Green Junior High School and Western Kentucky University

John Hanel, Research Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University

Staff, Center for Career and Vocational Teacher Education (cont.)

John Hillison, Assistant Professor, Occupational Education, Western Kentucky University

*Mark Newton, Research Associate, Center for Career and Vocational Teacher Education, Western Kentucky University

*Betty Robertson, Research Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University

*Roger D. Vincent, Staff Assistant, Center for Career and Vocational Teacher Education, Western Kentucky University

*Project Staff

APPENDIX B

ADVISORY COMMITTEE MEETING AGENDA

A D V I S O R Y C O M M I T T E E A G E N D A

An Alternative Work Experience/Career Exploration Program
Dean's Conference Room
College of Education
Western Kentucky University
February 5, 1975

10:00 a.m.	Opening Remarks	Kenneth Brenner Assistant Dean College of Education Norman Ehresman Director Center for Career and Vocational Teacher Education
10:10 a.m.	Introduction of Participants	Mark Newton Project Director
10:15 a.m.	Orientation to Bowling Green Junior High	Judy Given Teacher-Coordinator
10:30 a.m.	Slide Presentation of Project Pilot	Mark Newton Project Director
11:00 a.m.	Reaction/Discussion of Presentation	Committee Members
12:15 p.m.	Lunch	
1:00 p.m.	Questions for Discussion From Project Staff	Committee Members
5:00 p.m.	Adjourn	

CONCERNS OF THE PROJECT STAFF

1. What is the best methodology for orienting sponsors to program objectives, such that student participation is emphasized?

   a. individual contact
   b. group orientation
   c. other

2. Is it most beneficial for the student if he/she participates only in experiences which are commensurate with his/her measured and expressed interests?

3. Should student participants be evaluated relative to their on-campus experiences?

   If so, on what variables?
   If so, who should conduct the evaluation?

4. On what variables should student participants evaluate the program?

5. What variables should be of prime concern relative to developing an overall internal program evaluation model?

APPENDIX C

PUPIL WORK EXPERIENCE PLAN FOR
CYCLES I AND II

STUDENT WORK EXPERIENCE/CAREER EXPLORATION PLAN

Cycle _____

Dates _____

The _____, Western Kentucky University, will permit the pupils listed below, from Bowling Green Junior High School, to participate in career exploration activities under the supervision of _____ for the purpose of gaining knowledge and experiences in the occupational area(s) related to _____ _____.

Dates	Work Experience/Career Exploration Activities
February 27	Welcome Program Orientation Understanding Interests Workshop Career Films Safety Workshop
March 6, 18, 27	1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

Student Participants: _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____
Career Exploration Sponsor

STUDENT WORK EXPERIENCE/CAREER EXPLORATION PLAN

Cycle _____

Dates _____

The _____, Western Kentucky University, will permit the pupils listed below, from Bowling Green Junior High School, to participate in career exploration activities under the supervision of _____ for the purpose of gaining knowledge and experiences in the occupational area(s) related to _____.

Dates	Work Experience/Career Exploration Activities
April 3, 10, 24 & May 1	1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____
May 1	Program Evaluation

Student Participants:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____
Career Exploration Sponsor

APPENDIX D

SERIES 'A' OF CAREER COUNSELING FILMS

CAREER COUNSELING FILMS: SERIES A

1. Is a career as a technician for you?
2. Is a career in the health services for you?
3. Is a sales career for you?
4. Is a career in machining for you?
5. Is a career in the service industries for you?
6. Is a career in government for you?
7. Is a career in radio or television for you?
8. Is a career in the hotel or motel business for you?
9. Is a career in finance, insurance or real estate for you?
10. Is a career in electronics manufacturing for you?
11. Is a career in clerical work for you?
12. Is a career in the professions for you?
13. Is a career in management for you?

APPENDIX E

SPONSOR INFORMATION CARD

Gary Lakofka

Cycle I (March)
Manufacturing & Construction
Dr. Frank Conley
Industrial Arts Building Off. #300
Ph. 745-3251

Cycle II (April)
Machine Work
Mrs. Sharon Crawford
Helm-Cravens Library (4th Floor)
Ph. 745-3951

If you have any problems contact:

The program staff
403 College of Education
Ph. 745-3441

APPENDIX F

PROJECT ABSTRACT

A B S T R A C T

An Alternative Work Experience/Career Exploration Program for Ninth Grade Pupils

Mark Newton, Project Director
Center for Career and Vocational Teacher Education
Western Kentucky University
Bowling Green, Kentucky
42101

Norman D. Ehresman, Director
Center for Career and Vocational Teacher Education
Western Kentucky University
Bowling Green, Kentucky
42101

An Alternative Work Experience/Career Exploration Program
for Ninth Grade Pupils

The main objective of Project ACE (Alternative Career Exploration) is to develop, operationalize, and test the effects of a creative model that provides hands-on exploration and work experiences for middle school pupils.

By May 1975, Western Kentucky University, in cooperation with the Bowling Green Junior High School, will have provided intensive, planned career exploratory experiences for approximately 145 ninth grade pupils. Each pupil will have had an opportunity to explore (through participation and observation) two occupational areas on the University campus. At least 40 supervised hours of exploratory experiences will be provided per student in the two career areas. Each student will be placed according to his/her assessed interests as indicated by the Ohio Vocational Interest Survey and by expressed interests as indicated by the exploratory practical arts area selected for study upon entering the ninth grade. Students will be assigned to sponsors who are employees of the University and who volunteered their assistance for this endeavor. Related instruction and supplemental exploratory activities will be provided at the middle school in the practical arts area of interest to each pupil.

A premise upon which Project ACE rests is that Western Kentucky University is a typical employer in most respects. Employees of the book-store, snack bar, bowling alley, University farm, hospital, cafeterias, T.V. studio, computer centers, and other University sectors hire personnel who must meet the same employment standards and production requirements as those who work in similar private enterprises. The University as an

employer is atypical, however, in that it has the potential for offering and managing exploratory experiences in all fifteen United States Office of Education occupational clusters. Most work experience/career exploration programs cannot provide such a wide range of exploratory experiences.

In November, 1974, 20 students participated in a prog... pilot. Program modifications resulting from situations encountered during the pilot and recommendations of the program's advisory committee will be instituted during the next phase, which begins in March, 1975.

A cooperative spirit on the part of Western Kentucky University and the Bowling Green Independent School System is expected to be a key factor in the success of a realistic, meaningful, and transportable alternative work experience/career exploration program for middle school students.

APPENDIX G

SPONSOR INFORMATION SHEET AND
HELPFUL HINTS

AN ALTERNATIVE WORK EXPERIENCE/CAREER EXPLORATION
PROGRAM FOR NINTH GRADE PUPILS

SPONSOR'S INFORMATION SHEET

We appreciate your willingness to provide career exploration/work experiences for ninth grade pupils attending Bowling Green Junior High School.

A small-scale pilot program was conducted last semester on our campus. The following "helpful hints" were derived as a consequence of the program pilot:

Helpful Hints for Sponsors

1) Many pupils experience some degree of "culture shock" as a part of their initial campus visit. An overt attempt at making pupils feel comfortable and accepted will help allay some anxieties.

2) Pupils profit best from participatory (hands-on) experiences.

3) The pupils you are sponsoring have demonstrated some degree of interest in your specific career area. As much exploration of your career area as possible (education required, various levels within your career, related careers, your life style, etc.) is very profitable for pupils.

4) Pupils profit from an explanation of why the specific career related activities in which they are engaged are of value.

5) Remember, 14 year-olds are "active" by nature.

6) The time when your pupils break for lunch is your decision. You may wish to negotiate an appropriate time with those you sponsor. Many times pupils like to eat with their peers and report back to their station at a time specified by their sponsor.

7) We will contact your office if a pupil you are sponsoring is absent.

8) Pupils are to report to their central assembly point in the College of Education at 1:30 each day. At that time they will be transported back to the junior high school by bus.

9) If a problem or concern of any nature arises, please contact the program office (3441).

SPONSOR'S INFORMATION SHEET (con't)

Sponsor Orientation Session

The following dates have been arranged for your convenience in attending a sponsor orientation session. You may attend on:

	Date	Time	Place
A)	February 28, 1975	11:00 - 12:00	DUC Rm. 230
	or		
B)	March 3, 1975	11:00 - 12:00	DUC Rm. 230
	or		
C)	March 4, 1975	11:00 - 12:00	DUC Rm. 230

Student Arrival Times and Dates

Cycle 1		Cycle 2	
Date	Time	Date	Time
March 6	9:00 - 1:30	April 3	9:00 - 1:30
March 18	9:00 - 1:30	April 10	9:00 - 1:30
March 27	9:00 - 1:30	April 24	9:00 - 1:30
		May 1	9:00 -11:30

Further questions or concerns may be answered by contacting Mark Newton, Roger Vincent, Judy Given, or Betty Robertson at:

The Center for Career and Vocational Teacher Education
403 College of Education
Phone: 745-3441

APPENDIX H

DESCRIPTION OF CAREER EDUCATION IN THE BOWLING GREEN CITY SCHOOLS

CAREER EDUCATION, K-12 is

Project PEOPLE

in the Bowling Green, Kentucky
Independent School System

"CAREER EDUCATION is A STRATEGY FOR TEACHING in the Bowling Green, Kentucky, City Schools"

The career education program in the Bowling Green City Schools is in its third year of operation. Project PEOPLE, synonymous with Career Education, is an acronym for Personal Enhancement of Occupational Preparation through Life-Centered Education. Project PEOPLE involves the total staff, and is thoroughly institutionalized, K-12. The program is people-oriented and life-centered around the teacher, the student, and the person-in-the-occupation.

ELEMENTARY CAREER AWARENESS (K-7)

In the elementary grades, students have the opportunity to become acquainted with a variety of occupations, using the U. S. Office of Education's 15 job clusters as a reference point for career education unit studies. All schools and all staff members use career education as their strategy for teaching; one or more resource persons are interviewed by the students as part of the unit study in an effort to humanize the curriculum. Relevancy to subject matter is achieved as students aid in planning their work, using traditional texts and reference materials to relate their application to the world of work and the resource persons interviewed.

JUNIOR HIGH CAREER EXPLORATION, (8-9)

The Junior High students build upon their awareness of the world of work with the opportunity to experience "hands-on" activities in the Practical Arts program. This area affords the students a selection of ten of the fifteen job clusters for in-depth study and manipulation of the basic tools used in various occupations. Career curriculum units are presented in all classes; resource persons are interviewed as part of the continuing awareness of the world of work. Intensified guidance at the junior high level assists the student in assessment of himself and his capabilities in order to plan and prepare for his career.

SENIOR HIGH SCHOOL CAREER PREPARATION (10-12)

During the high school years, students pursue their tentative career choice with a program of studies which will prepare them for future work. An on-campus high school vocational program provides the students with a variety of experiences for skill development. All academic areas include career education unit studies; again, the relationship between the subject being taught and its use in the real world is stressed as human resources are utilized. An on-campus placement service offers students employment positions in either part-time or full-time job situations.

APPENDIX I

INSTRUMENTS FOR PUPIL EVALUATIONS OF CYCLES I AND II

NINTH GRADE WORK EXPERIENCE/CAREER EXPLORATION

STUDENT QUESTIONNAIRE

Directions:

You have now finished the first half of your work experience/ career exploration program at Western Kentucky University. We are very interested to know what you honestly think about it so far.

Please circle the letter(s) which best describes how you feel about each sentence. Your answer will tell us if you STRONGLY AGREE, AGREE, DISAGREE, or STRONGLY DISAGREE with each sentence. Read each sentence carefully and BE HONEST ABOUT HOW YOU FEEL ABOUT IT.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The first day at Western helped me to understand what this program is all about.	SA	A	D	SD
2. On the first day I learned a lot about my interests from the way the OVIS test was explained and by using the workbook I was given.	SA	A	D	SD
3. The things Mr. Niva told us about safety at Western were important.	SA	A	D	SD
4. The films I saw helped me understand different careers.	SA	A	D	SD
5. The films I saw were a waste of time.	SA	A	D	SD
6. I have learned a lot about different jobs and careers since coming to Western.	SA	A	D	SD
7. This kind of program would be a waste of time for other ninth grade students.	SA	A	D	SD
8. I have enjoyed my experiences at Western.	SA	A	D	SD
9. My career sponsors at Western have been helpful.	SA	A	D	SD
10. My career sponsors at Western are not interested in me.	SA	A	D	SD

	Strongly Agree	Agree	Disagree	Strongly Disagree
11. My career sponsors at Western want me to learn as much as I can about their careers	SA	A	D	SD
12. I DO NOT like my career sponsors at Western.	SA	A	D	SD
13. It is hard for me to see what this program has to do with the classes I am taking at the Junior High.	SA	A	D	SD
14. I understand why I was placed in the career areas in which I am working/exploring.	SA	A	D	SD
15. My career sponsor(s) have let me do things instead of just watching.	SA	A	D	SD
16. I talk to my parents about the things I do at Western.	SA	A	D	SD

General Information

1. What was the location of your work experience/career exploration? (Please give either the department, area or your sponsor's name)

2. If you have any comments about the program so far, please list them below. We are interested in anything you have to say about the program.

_____

_____

_____

_____

_____

THANK YOU VERY MUCH

NINTH GRADE WORK EXPERIENCE/CAREER EXPLORATION

STUDENT QUESTIONNAIRE

Directions:

Today you completed the second half (Cycle II) of your work experience/ career exploration program at Western Kentucky University. We are very interested to know what you think about this last half of the program.

Please circle the letter(s) which best describes how you feel about each sentence. Your answer will tell us if you STRONGLY AGREE, AGREE, DISAGREE, or STRONGLY DISAGREE with each sentence. Read each sentence carefully and BE HONEST ABOUT HOW YOU FEEL ABOUT IT.

1.	I learned something new about the world of work.	SA	A	D	SD
2.	Four days in one area are too many.	SA	A	D	SD
3.	This program has helped me to better understand what kind of work I would like to do.	SA	A	D	SD
4.	I learned what skills are necessary to get a job in the area I explored.	SA	A	D	SD
5.	My experiences helped me to see why it is important to stay in school.	SA	A	D	SD
6.	I have learned alot about different jobs and careers since coming to Western.	SA	A	D	SD
7.	This kind of program would be good for other ninth grade students.	SA	A	D	SD
8.	I have enjoyed my experiences at Western.	SA	A	D	SD
9.	My career sponsors at Western have been helpful.	SA	A	D	SD
10.	My career sponsors at Western were interested in me.	SA	A	D	SD

11.	My career sponsors at Western wanted me to learn as much as I could about their careers.	SA	A	D	SD
12.	I liked my career sponsors at Western.	SA	A	D	SD
13.	This program has helped me to understand why my classes at the Junior High are important.	SA	A	D	SD
14.	I understand why I was placed in the career areas in which I am working/exploring.	SA	A	D	SD
15.	My career sponsor(s) have let me do things instead of just watching.	SA	A	D	SD
16.	I talk to my parents about the things I did at Western.	SA	A	D	SD
17.	I talk to my teachers about the things I did at Western.	SA	A	D	SD
18.	The program staff members (other than sponsors) were helpful.	SA	A	D	SD

General Information

1. What was the location of your work experience/career exploration? (Please give either the department, area or your sponsor's name)

2. If you have any comments about the second half of the program, please list them below. We are interested in anything you have to say about the program.

_____

_____

_____

_____

_____

THANK YOU VERY MUCH

APPENDIX J

SCHOOL SENTIMENT INDEX

SCHOOL SENTIMENT INDEX

Directions: For each statement, indicate the extent to which you agree or disagree by marking the answer sheet:

a) if you strongly agree
b) if you agree
c) if you disagree
d) if you strongly disagree

For example:

I. My classes are too easy.

If you disagree with the statement you should mark C on the answer sheet as follows:

There are no right or wrong answers, so respond to each item as honestly as you can.

1. My teachers rarely explain to me why I deserve the grades I earn on assignments and tests.
2. I do my best in school.
3. My teachers are interested in the things I do outside of school.
4. Each morning I look forward to coming to school.
5. My school has too many rules.
6. My teachers allow students some choice in what they study in class.
7. I often feel rushed and nervous at school.
8. My teachers give assignments that are too difficult.
9. Students here aren't very friendly.
10. My teachers try to make their subjects interesting to me.
11. I hate having to do homework.

12. My teachers are interested in what I have to say.

13. When I'm at school, I'm unhappy.

14. This school is run like a prison.

15. In most of my classes, individual students can choose assignments which are interesting to them.

16. If I did something wrong at school, I know I would get a second chance.

17. My teachers give assignments that are just busy-work.

18. I enjoy working on class projects with other students.

19. My teachers really like their subjects.

20. I would rather learn a new sport than play one I already know.

21. My teachers are personally concerned about me.

22. School depresses me.

23. Whenever I'm called to one of the offices at school, I feel upset.

24. I think there is too much pressure in school.

25. My teachers give me too much work.

26. School is a good place for making friends.

27. My teachers are boring.

28. I like the challenge of a difficult assignment.

29. My teachers don't try to understand young people.

30. I stay home from school whenever I can.

31. My classes are too big.

32. I'm very interested in what goes on at this school.

33. My teachers explain assignments clearly.

34. In school I have to memorize too many facts.

35. The main reason for going to school is to learn.

36. If I had a serious problem, I don't know one teacher in my school I could go to.

37. Students have enough voice in determining how this school is run.

38. My teachers have encouraged me to think for myself.

39. My teachers have been fair to me.

40. I usually don't get involved in many school activities.

41. My teachers won't give me any idea of what will be on their tests.

42. I really like most of the kids at this school.

43. My teachers don't allow me to be creative.

44. Teachers recognize my right to a different opinion.

45. I get tired of listening to my teachers talk all the time.

46. I attend many school events.

47. I like to talk to my teachers after class.

48. I think my teachers are too old-fashioned.

49. I really feel I'm part of my school.

50. My teachers frequently show a lack of preparation.

51. It is difficult for a new student to find friends here.

52. I have a good relationship with most of my teachers.

53. My favorite classes are those in which I learn the most.

54. I would like to go to school all year long.

55. Each September I look forward to the beginning of school.

56. Our school is so large, I often feel lost in the crowd.

57. I usually get the grade I deserve in a class.

58. My teachers are friendly toward the students.

59. I try to do good work in class.

60. My teachers still respect me as a person even when I've done poorly on my school work.

61. I like school better than my friends do.

62. There's no privacy at school.

63. My teachers let me know what is expected of me.

64. I enjoy the social life here.

65. My teachers grade me fairly.

66. There are many closed groups of students here.

67. My teachers like working with young people.

68. I often buy books with my own money.

69. My teachers are too concerned with discipline.

70. I liked school better when I was in elementary school than I do now.

71. At school, other people really care about me.

72. If I thought I could win, I'd like to run for an elected student body office.

73. My teachers will discuss grade changes with me.

74. My teachers just don't care about students if they're not going to college.

75. I do more school work than just what is assigned.

76. Teachers at my school cannot control their classes.

77. My teachers give me individual help willingly.

78. Lunch time at school is not fun.

79. My teachers are often impatient.

80. If I had the choice, I wouldn't go to school at all.

81. My teachers have "pets."

82. My teachers often waste too much time explaining things.

83. I follow the school rules.

APPENDIX K

EXTERNAL EVALUATION REPORTS

An Alternative Work Experience / Career Exploration

Program for Ninth Grade Pupils

An Experimental Study

Western Kentucky University

Bowling Green, Kentucky

Evaluation Report

Lillian Buckingham

Site Visit

Western Kentucky University

Bowling Green, Kentucky

April 9, 10, 11, 1975

In accordance with the request of the Project Director of "An Alternative Work Experience/ Career Exploration Program for Ninth Grade Pupils: An Experimental Study" an evaluation of the programmatic aspects was to be made. Each of the two evaluators was to present his/her findings to the Center Staff and submit a written report within thirty days.

Information about the program, supportive background, and internal evaluation appendices were readily available. During the on site visits the following educators gave further insights into the program:

Norman Ehresman
Mark Newton
John Hanel
Judy Given
Betty Robertson
Roger Vincent
Larry Conner
Vincent Feck
Walter Kleeman
Clayton Riley
Sarah Laws
Otto Mattei
Erma Hunt
Ms. T. Carter
Shirley Gibbs
Mrs. Karsner
Jerry H. Lyons
Mrs. Boderick
Mrs. Doughty
William Lamb
Teachers in Mars Satellite - Bowling Green Junior High
Students (27 individuals on work/experience stations)

During the visit, the evaluator met with the Project Staff for overview of the program, discussion of activities, note of the various record keeping and notation systems, and further delineation of responsibilities. A visit to the Junior High, a ride on the bus with the students to university station, discussions with administrative force at Bowling Green Junior High, sponsors and other faculty members, professional and non-professional, and students provided further in-depth understanding of the dynamic project, its potentials, its strengths and weaknesses, and its overall accomplishments.

The report is therefore based on these facts gathered from a very responsive, thoroughly dedicated body of citizens in the educational milieu.

Commendations

A program of this depth and promise can point with pride to these merits:

The organizational structure for the staff, follow-up and provision for future program development and evaluation

The responsive willingness of the sponsors to take on additional tasks

The emerging bank of resource personnel

The involvement of professionals, para-professionals, and non-professionals in a work/experience setting for junior high students addressed to meet the real life experiences of youth in the middle educational level

The professional approach of the Center Staff as implementers and facilitators of the Sponsorship System with no overtones of supervision

The maintenance of records and charts for ease of communication, identification and modification

The close, warm cooperation between the Bowling Green Independent School District and the university system, between university and junior high faculties, and an enthusiastic highly visible and professional Center Staff with all who are involved in the experimental program

The extension of the Career Education concept into Western Kentucky University

The adherence to the clearly delineated process with provisions for changes and necessary additions

The procedures for the selection of the youth clearly defined, orderly arranged with definite responsibilities spelled out for the youth

The provision of continued funding of this unique project

The attainment of obtainable, identifiable goals with provisions for growth and further expansion of sponsorships by university personnel

The booklet "Understanding Interest", an excellent vehicle for students' use and potential resource for teacher-training classes, in-service workshops for teachers in Bowling Green Independent School District

Provisions for a variety of product evaluations

Recommendations

Western Kentucky University over the years has addressed itself to serving the educational needs of the community and the regional requirements. It has officially stated its purposes and objectives. It has kept current with the demands on its teachers by the establishment of a Center for Career/Vocational Teacher Education and has spelled out the resources to be furnished. Within its scope of operation is an awareness of its consultative function to the public school system in providing realistic work experiences in all phases of occupational exploration and preparation. Especially in need of "hands on" experiences are the active, rapidly developing, uncertain youth in the junior high school. For these, the project undertaken by Western Kentucky University might determine the merits of work experience program.

As keys to the program, it is essential that sponsors within the university system be totally committed to the new direction, seek to absorb the emerging adult and offer meaningful experiences for students' understanding and attendant decision making. The sponsors who are volunteers must be properly prepared for their role and functions and encouraged throughout the program without the feeling of additional burdens on their time or insufficient help with these younger students. A step in the right direction

has been taken and a professional camaraderie and rapport has been established. However, the following recommendations are made for the improvement of the plan, the enrichment of those involved, and for the exemplary features that can be transported and used by other institutions.

It is therefore recommended that:

1. the orientation of sponsors include a deeper understanding of the junior high youth and their potential, the skills youth bring to the stations, their need for action-centered experiences, and the programs offered in the junior high school.

2. the sponsors visit and meet with the junior high school faculty, and discuss ways in dealing with these developing youth in an adult-level setting.

3. the sponsors and junior high school faculty develop an exchange information route for student growth and improvement.

4. the sponsors share with the junior high teachers the types of exploration activities to be covered during the student participation as set forth in the contract.

5. the sponsors keep the members in their departments informed about the activities carried on, the results and changes occuring and encourage others in the university setting to participate at some time.

6. the current sponsors serve as the nucleus on an Advisory Committee to the Center Staff in concert with representatives from the Bowling Green Junior High for the continuation of the program in order to refine activities, identify time involvement in a particular experience, react to outcomes, etc.

7. the sponsors arrange for a meeting with the junior high educators at the conclusion of the second cycle to discuss the outcomes, results, and set in motion the mechanics for refinement and improvement in sponsorship delivery of work/experiences and exploration for junior high youth.

Inasmuch as the Bowling Green Independent School District has established a firm commitment to Career Education and defined the philosophy so that youth and the educator will fulfill these goals, the junior high staff has developed and implemented unique procedures which enable these students to explore and prepare for the next choices. The faculty responsible to a superb administrator is well versed in the concepts, well organized and highly innovative, and exceptionally well informed about their students. The organizational structure provides for flexibility of scheduling, sampling of exploratory experiences, and in depth counseling and guidance of the students.

It is therefore recommended that:

1. prior to the institution of the work station at the university, the junior high staff arrange an informal meeting with the sponsors in the junior high for the purposes of getting to know one another, to see the facilities and program operation - a true rapport.

   A word of caution: this is not the time to mind-set the sponsors relative to students' behavioral problems. A general overall feeling of the strength to be developed, the fact that work models are highly visible and the effect on the youth culture as an

entity in career education will serve much purpose. The availability of the junior high staff for resource could be determined at this particular meeting. Also the discussion of the work involved in the sponsorship program can be discussed informally.

2. during the students' exploration visit, the junior high teachers be available in the Center at the University to serve as resource specialists to the sponsors. During these scheduled visits the junior high educator may give further insight in the middle school program, offer some facts relative to student behavior, perhaps give suggestions for activities that could be incorporated into the program, reinforce skills at the junior high level and gather first-hand knowledge of youths' reactions in an adult training session, etc.

Just as communication elements need to be considered for the strengthening of this project, so are the time factors important allies. Faculties and students have alluded to or spoken about the time schedules. For the expansion, strengthening and determining of the future continuing success, it is recommended that:

1. the satellite group be identified early in September at the time that the insurance enrollment is begun. During this period parents can be alerted to the program, students' involvement and outcomes, parental understanding of the need for insurance, and permission for the student to participate in this experience.

2. sponsors should study their particular work stations, not only for exploratory functions but the time for students to be on the job. These time slots, including length of time in each segment, a morning or afternoon shift, should become a part of the work station. The summation of all factors therefore in the work/experience should be lodged with the Center Staff and sent to the junior high stations for further implementation and determination of student program - released time.

Suggestion: If more sponsors can be attracted to the program, and opportunities for morning and afternoon experiences can be provided in the university and through the flexible exploratory exposure for the junior high through fall, winter and spring seasons and over the various shifts. There are many advantages for all concerned.

The alternative work experience has a rich mine of information and strong support of those for whom it is intended, and dedicated, committed faculties interested in the continuance of this unique program. The following recommendations made are indicative of this evaluator's conviction that <u>such a program should be continued enlarged, transported and acknowledged as exemplary and far-sighted.</u>

1. A culminating conversation or conference should be provided to include sponsors, department heads, faculties and administrators. During this session, a panel consisting of a student from the work/experience program, a parent, a sponsor, an administrator at the college and junior high level should describe, react to, give results, offer suggestions, etc. Among the audience should be representatives from the State Department of Education, i. e., Vocational-Technical Education, Curriculum, Higher Education, Guidance and Counseling, as many as possible of Bowling Green School Board members, Principals, Career Education Director, and media.

2. The sponsors of the programs who willingly have volunteered and carried on additional tasks, should be officially recognized at a University Staff Meeting with a summary of their extension of expertise in the university setting becoming part of their dossier. Perhaps the students and the junior high staff might participate actively as well as cover the event in their school papers.

3. A description of this innovative program geared to the level of those for whom it is intended should be disseminated throughout the State Department of Education in Kentucky, to the Bowling Green community, and the university system.

Observations

Over the period of time there is provision for improvements in the quality of the program through experience and time.

The attitudes of youth at this age and sponsors are changing with a deeper understanding of what each is doing.

A total school philosophy for a strong career education program in the junior high provides a firm base on which a university system can extend career awareness, exploration and preparation for youth.

The professional warmth, personal interest in students, the superb Center Staff, the willingness of sponsors, and the on-going dedication of the junior high staff have added luster and strength to a unique program.

Programs at the junior high will be strengthened, continued so all youth may have additional information in order to make wiser decisions.

Western Kentucky University belief in the program is substantiated by its refunding, plans for the Life Career Games of Walz and Benjamin, and potential inclusion in the School Community Relations of the Office of the University.

EVALUATION REPORT:
AN ALTERNATIVE WORK EXPERIENCE/CAREER EXPLORATION PROGRAM FOR NINTH GRADE PUPILS:
AN EXPERIMENTAL STUDY

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April 22, 1975

The following report will be an expansion of the oral evaluation and presentation on April 11, 1975.

As indicated in the presentation, this written evaluation will concern itself with sponsor's comments, junior high faculty's comments, recommendations in these areas, and observations of the program.

The statements will, hopefully, be clear, concise, and to the point. Recommendations are made to you as suggestions with no definite procedure to correct the matter. It is felt that you have the capabilities to remedy these minor problems.

SPONSOR'S COMMENTS

1. Junior high school students demonstrated a high degree of interest, and their accomplishments while on the job were over and above the expectations of the sponsors.

2. Time students were on campus for hands-on experiences.
   a. In some areas the time element was too short to provide the student with nothing more than a superficial experience.
   b. At other times, students were not on campus to be exposed to worthwhile experiences (ex: Recreation, Military, Science).
   c. At present, the afternoon working session tends to be a waste of time and/or insufficient to provide a "quality" hands-on experience.

3. Sponsored related "hands-on" experiences should be on a 1 to 1 relationship to provide quality experiences.

4. Information should be available to each sponsor on each student that is assigned to him. The following areas could possibly be provided:
   a. Interests that student might have in the particular areas
   b. Experiences that he/she would like to do while on the job
   c. Identification of behavioral problems
   d. What experiences the student has already been exposed to
   e. Anyother pertinent information

5. Students lacked adequate information in certain areas of exploration (ex: Health occupations)

6. Sponsors were not always "sure" what they were to do or their responsibilities or limitations as a resource person.

a. Some sponsors were delegated their assignment from their immediate supervisors.
b. These assignments hampered their own performance where they could not continue in the next cycle.

7. The communication, follow-up, and personal contact with the project staff was excellent.

8. Sponsors liked the flexibility that was available to them during cycles to provide "hands-on" experiences that both parties actually wanted or thought beneficial.

9. Sponsors indicated willingness to participate as a sponsor and a resource vehicle for the junior high school.

10. Individual sponsors were not sure what Career Education consisted of.

BOWLING GREEN JR. HIGH SCHOOL FACULTY'S COMMENTS

1. Would like more information back from sponsors on students assigned to them.
   a. Information received by the faculty only occurred when there was a problem.
   b. Visitation with sponsors could provide valuable information.

2. Sponsors should receive some type of orientation on what is a "ninth-grade" student, it may consist of interests, habits, experiences they desire, or have accomplished and would like to do again.

3. Would like to be involved in the development of the "hands-on" experiences for the students.
   a. Could help identify students' interests and abilities to perform in certain areas.

4. Parents of students participating in the program should be oriented to what is being attempted.
   a. In some cases this has been accomplished, but not all.

5. Realism in the work experience should be stresses even minimal assignments.

6. Tends to take students out of the classroom, but provides the student with a wealth of insight into his own personality and job interests.

RECOMMENDATIONS

1. Time element
   a. Consideration should be given to the possibility of alternating time periods. In some areas, students missed experiences be-

cause they could not be on campus at that time.

b. Earlier identification of satellite groups in the school year. This could remove any problems with insurance and parental permission to participate in the program.

2. Sponsors
   a. A procedure for the selection, orientation, and training of sponsors should be developed.
   b. A high school visitation for all sponsors should be incorporated.
   c. In all areas "hands-on" experiences should be developed.
   d. A means should be developed to allow sponsors to provide information to fellow workers in their areas about the program.
   e. Sponsors should form the nucleus for an advisory committee to improve and expand the current program.
      1. Development of "hands-on" experience
      2. Development of a system of communication up-and-down the line

3. Junior high school faculty
   a. Staff should be available on campus to act as a resource person while students are engaged in experiences.

OBSERVATIONS

1. The program will continue to improve as all parties gain experience with operation of the project.

2. The personal and professional approach to student, junior high school's staff, and sponsors by the project staff has provided excellent ground-work for the project.